PRACTICAL PHYSIOLOGY.

Lectures ON EXPERIMENTAL PHYSIOLOGY.

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LECTURE I.—INTRODUCTORY.

OBSERVATION AND EXPERIMENT.

GENTLEMEN,—Physiology, like every other branch of natural science, is based upon observation and experiment.

When we merely observe natural phenomena we do not interfere with them in any way; we simply watch them. Scientifically speaking, we *observe*, not only when we look at a thing, but also when we listen to it, when we taste it, smell it, touch it, feel its weight or temperature. Our senses may be aided by various appliances. For example, we use a microscope to enable us to see things that are small; or we employ such instruments as the ophthalmoscope, the laryngoscope, or the endoscope, in order to see some of the hidden parts of the body. We often help our sense of hearing with a stethoscope. Our thermal sense receives the aid of the thermometer and other instruments. The balance assists our sense of weight, the sphygmograph our tactile sense,—and so on. I might adduce other examples; but these are sufficient to show how the range of our powers of observation may be extended.

The mere observation of physiological phenomena is not a means of research which is powerful in enabling us to find out the causes of events. For this purpose experiment is generally necessary. When we experiment we no longer merely regard things as they are, but we interfere with them in some way, and observe the results of our interference. A single illustration will suffice to impress you with this distinction. We have—all of us—often noticed the fact that, at intervals, our chests rise and fall: that is an *observation*. Now, be good enough to arrest these movements; in other words, hold your breath. In so doing you interfere with the phenomenon previously observed—you perform an *experiment*. Cease to breathe as long as you can, and observe the results. Ere the experiment proceed far you experience an unpleasant sensation, and a desire to take a breath. Before very many seconds have elapsed this desire becomes so intense that you are unable longer to resist its impulse. You breathe, and almost immediately thereafter you experience an agreeable feeling of relief. The results of this simple observation and experiment are—that your chests rise and fall at intervals, and that if you hold your breath you soon experience an unpleasant sensation and a desire to breathe. An agreeable feeling follows the re-establishment of the respiratory movements. These are *facts*. It is quite impossible for you to form an exaggerated idea of the importance of carefully ascertaining what are the *facts* of any case. It is, of course, extremely easy to unbridle the fancy and imagine any number of events that might take place. It is quite another matter to find out those which really do occur. Medicine has suffered terribly, and does still suffer, from the poisonous effects of *false facts*, or I should rather say of *fictions*, which have been put forth as facts. It seems monstrous that in the scientific world anyone should say he has seen that which he has not seen; yet it is to be feared that some are guilty even of this gross offence. The majority of untruths are, however, due to hasty and imperfect observation, and to faults of memory. It too often happens that in practical medicine experiments are not watched with the patience and care which they require. The results are frequently entrusted to the memory instead of being recorded at the moment of observation. The lapse of time often produces painful distortions of them which the observer is unconscious of. This unsatisfactory mode of procedure is fraught with evil; the scanty amount of reliable knowledge which we at present possess regarding the actions of remedies is in large measure due to its baneful influence. Scientific facts ought never to be left tossing to and fro at the mercy of a sea so proverbially treacherous as that of memory. Let me, therefore, urge you to ascertain facts with infinite care, and to make an accurate record of them as speedily as possible.

From an assemblage of facts, or even from a single fact, we draw conclusions. Here it is needful that we be particularly on our guard. Physiological experiments are usually of a very complex nature. Living things are fickle: the same individual varies much in even short periods of time; one individual, too, differs much from another of even the same species. It is impossible to take any two living beings, and say that the vital phenomena of the one are in every respect identical with those of the other. For the solution of most physiological problems a large number of observations and experiments are therefore necessary. Suppose, for example, it be our object to ascertain the influence of some therapeutical agent upon the blood pressure: we do not content ourselves with a single experiment, for we know that the blood pressure undergoes much variation even when an animal is in a physiological condition; and therefore when we desire to determine the precise effect of any reagent upon the pressure, we require to perform a number of experiments ere we venture to draw conclusions. In consequence of this inconstancy in the phenomena of life physiology wears, for the present, an aspect which differs very decidedly from that which physics and chemistry present. These sciences have a precision which physiology in many of her departments still lacks. It is as yet impossible for us to take any two nerves, and say beforehand that the degree of excitability of the one is equal to that of the other. Hence we cannot say *à priori* that an influence which is sufficient to affect the one will suffice to affect the other. Of this fact we have daily demonstrations in the effects produced by an orator upon his audience: the same idea may move some to tears and others to laughter; some may experience a peculiar sensation at the roots of their hair, while others are scarcely affected at all. In the same way an electric shock communicated to a number of individuals at the same moment fails to affect all to a like degree. It may cause one person to manifest signs of pain and fright, while another remains almost indifferent to it. A similar variation in results is observed on the administration of many drugs. This want of precision can only be supplied by our ascertaining how physiological phenomena can be so regulated that in any two individuals they can be made identical; or by ascertaining what is the precise difference between the physiological states of any two individuals. Until we accomplish this, physiology, and of course medicine, cannot be precise. Every day throws new light on the manner in which our difficulties in this path may be diminished. To overcome them is what we are all striving after. As yet we can have no conception of the greatness of future achievements in this direction. I might give you various reasons why I fear that these achievements will never be complete; but that gloomy side of the picture we will pass by, lest it make a dangerously deep impression on our minds.

Regarding, then, the fickleness of physiological events, let us beware of drawing conclusions from scanty data, lest we thereby deepen the darkness which we seek to lighten. The physiological exploration that lies before us is mostly of a difficult character; most of the easy things have been done. You need not hope to discover many things by accident. Your best discoveries will, in all probability, be those which are made in the pursuit of some line of research entered upon after much careful and piercing thought. Should you frame ideas, and then proceed to prove their truth by the touchstone of experiment, it is very necessary to beware of fitting the facts to the hypothesis. You must ever hold yourselves in readiness to abandon the idea the moment you find it to be incompatible with fact.

With these brief considerations regarding the method of inquiry to be adopted in physiological research, let us examine a few fundamental principles concerning

MATTER AND ENERGY,

the two factors of the physical world. The necessity for our forming the basis of our operations in this way will soon become apparent.

Matter has been defined as that "which occupies space"; but with regard to its ultimate nature, we are in profound ignorance.

Energy is the term now applied to that which was formerly designated *force*. It has been admirably defined as "the power of doing work"; but with regard to its ultimate nature, we know nothing definite. Perhaps it is only an attribute of matter; but whether that be true or not, it is extremely convenient to speak of it as a *thing*.

There are various kinds of matter, which, as far as we know, differ essentially from one another. These are the chemical elements. True, matter may undergo marvellous transformations. How different a bit of charcoal is from a diamond! How different a caterpillar is from a butterfly! What resemblance is there between a lump of ice and its components oxygen and hydrogen? Yet amid these metamorphoses of matter, there is this important fact, that the elementary kinds of matter cannot by any means at present at our disposal be transformed one into another.

There are various kinds of energy, or, I should rather say, *forms* of energy; for, unlike the elementary kinds of matter, one sort of energy can be transformed into another. Probably the various manifestations of the action of energy — e. g., heat, light, sound, motion—are all referable to the action of two great forms of energy, attraction and repulsion. Thus we have chemical attraction or affinity, electrical and magnetic attraction, the attraction of gravity, and that of cohesion. On the other hand, we have electrical and magnetic and thermal repulsion. The attractive and repulsive forms of energy give rise to various movements of matter. These motions may be, ordinary or visible motion, the motion which gives rise to sound, those which are supposed to constitute heat, light, and nerve energy. For convenience, motion is often spoken of as if it were energy; hence heat, light, sound, &c., are often called forms of energy. In truth, however, motion is but the result of the action of energy, and therefore the various motions are not in themselves forms of energy, but manifestations of the action of one or more forms of energy. Keeping this in view, it is however convenient that we should adopt the usual phraseology, and speak of these different motions as forms of energy.

The forms of energy are usually classified into physical, chemical, and vital. The physical forms are manifested by heat, light, sound, ordinary motion, electricity, magnetism, repulsion, cohesion, and the attraction of gravity. The so-called chemical form of energy is chemical affinity. All these forms of energy are found in living beings. In addition to these, however, living things manifest forms of energy which are not found in the inorganic world. These are termed *vital* forms of energy. These include nerve energy, the energy which produces a change in the form of contractile tissues, and that which causes a living being to grow in its own peculiar fashion. It is however impossible, in the present state of our knowledge, to say with certainty what are the members of these three groups, more especially of this last.

Let us now attend to some experiments illustrative of this interesting fact, that one form of energy may be transformed into another. I show you a galvanic battery (two large Bunsen's cells). A current of electricity is being produced by the battery. I might demonstrate this fact to you in various ways; one will suffice. It has been ascertained to be a fact that, under certain conditions, a current of electricity from a battery of this sort is able to cause a magnetic needle to move. I shall not at present enter into a description of the necessary arrangement of the magnetic needle, or of the wire which is to conduct the electricity round it. These arrangements have all been made; for the present, therefore, content yourselves with simply watching the needle. You see that at this moment it is motionless. Now, however, I permit a portion of the electrical current produced in the battery to flow through the wire which surrounds the needle. The needle suddenly swings round. This fact shows that a current of electricity is being generated in the battery; and it further shows that this electrical current can produce ordinary motion. The form of energy passing from the battery along the wire gives rise to another form of energy, manifested by ordinary motion. But this electricity may give rise to other forms of energy; for example, heat and light. At this moment the electrical current is flowing through a thick copper wire. Touch the wire, and you will scarcely detect that its temperature is above that of this other copper wire through which no electricity is passing at all. But watch what happens when I cut the electrified wire and connect its cut ends by a piece of thin platinum wire. The platinum wire glows with a white heat! Whence come the heat and light? From the electrical motion. They are peculiar vibratory motions to which the electrical motion is giving rise. Hence the motion of the electricity along the wire may give rise to ordinary visible motion in a magnet, or it may produce the exquisitely fine undulatory motions of heat and light. But, on the other hand, electrical motion may be derived from heat. For this purpose we employ this piece of apparatus, named a thermopile. It consists of a pile of metallic bars joined together like the limbs of the letter **W**. The bars are not all of the same metal: every alternate bar consists of bismuth, and the remaining ones of antimony. The ends of the bismuth bars are soldered to the extremities of those of antimony. One end of one of the bismuth bars is joined to a thick copper wire, the other end of which is joined to a free end of one of the antimony bars. (The unsoldered ends of these bars resemble the free ends of the limbs of the above-mentioned letter.) The wire is coiled round a magnetic needle. If *heterogeneous* metals such as those which I have mentioned be heated at their points of junction, a current of electricity results. I hold my warm hand near the junctions, and you see that the magnetic needle is slowly turning; thereby indicating that a current of electricity is passing through the wire. Thermal motion is producing electrical motion, and this again is giving rise to ordinary motion. Heat, or, in other words, thermal motion, may, however, be transformed into ordinary motion in other ways. Look, for example, at the water in this glass, bubbling and boiling in the greatest commotion. What causes it to move? The heat of the flame below it. Thermal motion is giving rise to repulsive motion, and this in turn to ordinary motion. But, conversely, we can readily transform ordinary motion into thermal motion. I cannot show you the Indian trick of producing fire by rubbing two pieces of wood upon one another; but I can readily produce a similar though not so brilliant phenomenon by hammering this piece of lead. A few blows in rapid succession suffice to render the lead so hot that the hand can scarcely bear the heat. Here, the visible motion of the hammer gives rise to a visible motion in the lead, causing a change in its form; but it at the same time produces an invisible motion which constitutes heat. You hear that sound is likewise produced: this is another kind of motion which is engendered in the lead by the visible motion of the hammer.

Chemical energy is a prolific parent of other forms of energy. I subject this lucifer match to friction, and there suddenly results sound, heat, and light. How come these? The visible motion of my arm gives rise to thermal motion. The moment the temperature is high enough the chemical affinity between the particles at the head of the match comes into operation; and while old compounds are split up, and new ones are formed, heat, light, and sound, or, in other words, thermal, luminous, and sonorous motions are produced. But really the visible motion of my hand is due to the chemical energy acting within the muscles of my arm. The operation of this chemical energy is brought about by the action of nerve energy, which liberates the chemical energy of my muscles, just as heat can liberate the chemical energy stored up in the lucifer match. Probably all the forms of energy produced in our bodies are derived from chemical energy stored up in the gaseous and solid food of which we are in continual need, and without which we cannot energise at all. It is perhaps not altogether acceptable that we should compare ourselves to steam-engines; yet, in some senses, we closely resemble them. The steam-engine derives its energy from chemical energy. It requires to be constantly supplied with appropriate substances, whose chemical energy can furnish the energy which is to do the work. We are just as helpless as the steam-engine with regard to the obtaining of energy; we cannot create it; we are compelled to borrow it, and, like the engine, we borrow it from the oxygen of the air, and from organic substances stored up in plants. But you will say, How do plants come to be the fortunate possessors of this subtle energy? Have they created it? No; they in turn have only borrowed it from the sun's rays. Under the agency of the

energy emitted by the sun, the tissues of a plant decompose various substances, the chief of which is carbonic acid. The carbon of this is stored up in the plant, while most of the oxygen is given off into the air. The sun's energy, contained in his thermal and chemical rays, tears asunder the carbon and oxygen, and in so doing stores up within both energy in the form of chemical attraction. When the plant tissues are burnt, the energy which the sun expended in separating oxygen from carbon is again obtained in its original forms of heat and light. If the combustion take place within the bodies of living animals, then, besides the heat, various other forms of energy result. This simple union of carbon with oxygen is the chief source of the various forms of energy exhibited by living beings. But you may ask, What is the source of the sun's energy? The only hypothesis which we have to account for this is, that at a remote period our planetary system was composed of diffused nebulous matter. Condensation and accumulation of this matter in the form of balls afterwards took place, and in this way the sun and his planets arose. The clashing together of particles of matter gave rise to enormous quantities of heat, which is slowly diffusing itself throughout space, and will continue to do so until there is an equal temperature over all. This hypothesis, therefore, ascribes the source of the sun's heat to the attraction of gravity. Most probably this is true; but mind you, it is only a hypothesis.

It has long been known that we cannot create or destroy matter. The labours of Joule and others have led to the belief that the same principle applies to energy. This principle is that which is termed the law of the conservation of energy. To express it in another way, we may say that the amount of energy in the universe is fixed—that is, we cannot detract from it or add to it, however much we may metamorphose fractions of it. A portion of one form of energy may be transformed into an exact equivalent of another. Nothing is lost. At first thought this does not seem to be true. When I let the hammer fall on the lead, it seemed as though the energy represented by the hammer's motion was annihilated the moment it fell. The most careful experiments have, however, completely demonstrated that in such a case the energy of the falling body is completely transmuted into other forms of energy. As shown by Joule, if one pound of water fall through a height of 772 feet, its temperature will be raised 1° Fahr. But, further, the amount of heat necessary to elevate the temperature of a pound of water 1° Fahr. will suffice to do an amount of work represented by the elevation of this quantity of water to a height of 772 feet.

These facts are of great value. Adopting the ordinary phraseology, we say they show that a certain amount of ordinary motion can give rise to a definite amount of thermal motion or heat, and that, conversely, a definite amount of heat can produce a definite amount of ordinary motion—in other words, can do a definite amount of work. We have seen that energy is "the power of doing work." We now see that a definite amount of energy in the form of heat can only accomplish a certain amount of work. But what is true of heat is true of any other form of energy. We know well that we cannot do work unless we eat. The store of energy at the disposal of the strongest of us is not unlimited; sooner or later it does its equivalent of work, and we, exhausted for the time, require to take in a renewed supply of food, with its store of energy.

In order to indicate any quantity of energy, it is necessary to adopt some unit, just as we use a grain or a pound as units when speaking of quantities of matter. The unit most commonly employed is a thermal unit—to wit, the amount of heat necessary to raise one pound of water through 1° Fahr. This unit is frequently employed, and therefore it is needful that you remember it. A heat-unit has been adopted because of its convenience, and, moreover, because every form of energy passes so readily into heat. An electrical unit is used for some purposes; but it is not my intention at present to enter into this matter. Before passing, however, let me say that a unit of work has been adopted, and it is important that you should remember what it is. The work-unit is the amount of work necessary to raise one pound one foot high; it is therefore named the *foot-pound*. We have seen that the amount of heat necessary to raise one pound of water 1° Fahr. is able to raise this amount of water 772 ft. high if it be made to do mechanical work; in other words, it can do 772 foot-pounds of work. One thermal unit is therefore equivalent to 772 work-units. Carefully remember these data; they are of much value in physiological dynamics. It is, however, important for me to state that, although the law of the conservation of energy holds good in the inorganic world, it has not as yet been shown to rule over all the forms of energy found in living beings. But no fact yet known is opposed to it; and every known fact completely supports it. We cannot doubt that it reigns as supreme in the organic as it does in the inorganic world.

I have hitherto abstained from employing two terms, which are, however, constantly used in speaking of energy. These terms are *potential* and *actual*. Energy may be potential or actual. When energy is potential, it is, as it were, at rest; it is capable of doing work, but not doing it. When energy is actual, it is active, doing work. This convenient distinction—made first of all by Rankine—will be rendered clear by one or two illustrations. A convenient example is that afforded by a cross-bow. When I draw the string of this bow, the muscles of my arm evolve actual energy, which is producing ordinary motion of my hand, motion of the string, and through it motion of the bow. I fix the string, and so set the bow in its bent position. Everything is now at rest. The actual energy I put forth has now become, as it were, stored up in the bow as potential energy, ready to be retransformed into actual energy the moment the string is let go. Again, gunpowder is a magazine of potential energy in the form of chemical affinity. When actual energy in the form of heat is applied to a few grains of a mass, however large, chemical affinity comes speedily into play throughout the whole mass, and actual energy in the forms of heat, light, and sound is evolved. The sun emits actual energy. This is stored up as potential energy in the tissues of plants. We consume these stores of potential energy, and convert the potential into actual energy, which does the work needed in our bodies.

I must now bring to a close this brief account of these fundamental considerations regarding matter and energy. In your physiological investigations I would urge you to keep steadily in view two lines of inquiry. With one eye, as it were, watch all that relates to *matter*; with the other regard all that has reference to *energy*. Only thus can a complete conception of physiological phenomena ever be obtained. Matter and energy are continually passing into and out of the body, after having played their parts in the marvellously complex arrangements of which our bodies consist. The matter and the energy enter together united in our solid and gaseous food. The matter is needed to repair and build up the machine, and to introduce to the organism the energy which is required for its various works. The matter leaves the body with its energy almost completely, if not entirely, expended. The energy which has been used in the body leaves it chiefly in the form of heat, that form of energy which all actual energy ultimately comes to. The matter of our bodies comes from the air and the earth, and returns to these. The actual energy of our bodies, linked on to the matter by the sun, ultimately assumes the form of heat, and diffuses into infinite space.

I have carefully abstained from entering upon any metaphysical discussion. All that relates to the spiritual part of our being is foreign to even an *introduction* to a course of experimental physiology.

Note.—For the benefit of those who have not attended this course it may be well to state that the experiments are performed by the teacher with the aid of the students. The vivisections performed are few in number, and confined to the frog and rabbit. The animals are previously narcotised by opium or chloral.

IT is proposed to make a considerable addition to the Brighton and Hove Lying-in Institution for Women and Children, in order to provide sufficient and suitable accommodation for a limited number of poor women whose labours threaten to be of unusual severity, or who may be labouring under some form of disease peculiar to the sex. There are to be five rooms, in one of which, on an emergency, two patients will be treated, and the estimated expense is £300.

Clinical Lecture
ON
FIBRO-PLASTIC TUMOUR OF THE AXILLA.

Delivered at University College Hospital,

BY PROFESSOR ERICHSEN,
SENIOR SURGEON TO THE HOSPITAL;
HOLME PROFESSOR OF CLINICAL SURGERY.

GENTLEMEN,—I wish to-day to direct your attention to a very remarkable case of axillary and mammary tumour that has lately been operated upon, and which presents points of interest from its size, its situation, and some circumstances attending the operation. The case is as follows:—

R. J. H——, aged forty-nine, housewife; has been married twenty-five years, and has had eight children. Of these, six are alive and well; the other two are dead. The patient says that she was quite well up to sixteen years ago, when she had two abscesses in the right breast. She went to the Bedford Infirmary as an in-patient, and left cured of the abscesses; but before she left the infirmary the surgeons told her that there was something the matter with the right shoulder. The patient herself could not notice anything wrong with it. The surgeons at the infirmary told her that they thought that an indolent tumour was forming in the region of the shoulder. Four years after she left the infirmary she began to feel some tightness under the right shoulder (in the axilla). The patient says that there was no swelling to be seen or felt. About five years ago she noticed a small lump between the axilla and the breast (very near where one of the abscesses had been). This tumour began to increase, and has been doing so ever since, and during the last eight months it has increased rapidly. She had a blow on the shoulder when she was seven years of age. Has never had pain of any kind in the tumour itself. It has never been tender. It feels, however, tense and heavy, and as if it were ready to burst. About three years ago she began to feel pain in the right arm, the pain being of a severe, tingling kind (pins and needles), and sometimes spasm of the muscles. The pain and spasm are confined to the inner side of the arm, and extend only from the axilla to the elbow; they are much relieved by grasping the arm firmly with the left

hand. The pain is only momentary, but has much increased in frequency and severity of late. The hand and fingers always feel numb and dead (pins and needles), more especially the thumb and forefinger. The right arm and forearm are larger than the left. Patient suffers almost continually from headache of the right side; the sight of the right eye is defective; and the breathing is very difficult at times. None of her relatives have ever had tumours of any kind, except two cousins, who died of "scrofula." Patient herself has suffered from abscesses occasionally. When the pain in the arm first made its appearance she came to this hospital, and was told that it was too far gone for removal. Patient still continues to menstruate, but not regularly. About two months ago she ran a needle accidentally into the tumour; this gave her no pain, and nothing came out through the puncture.

Description of the tumour.—The tumour occupies the upper part of the axilla, extending forwards almost to the sternum, displacing the nipple forwards to the edge of that bone, and backwards beneath the scapula. In front it reaches up close to the clavicle; below it reaches to the sixth rib. Large veins ramify over the surface of the tumour. The

skin is freely movable over all parts of the growth. The surface is tolerably uniform, not lobulated. The scapula is drawn forwards, apparently by the tumour. The side of the thorax is flattened in. The arm cannot be brought to the side. The humerus is freely movable, having no connexion with the tumour. On moving the tumour the scapula is found to move also. The tumour moves with the scapula up and down over the ribs. It does not appear to be connected with the ribs. The axillary artery can be distinctly traced by its pulsation coursing over the front of the upper part of the tumour, and giving off a descending branch. The pulsation can even be seen.

Oct. 28th. — Mr. Erichsen remarked that he felt some deep fluctuation on the front of the tumour, about its middle.

Nov. 2nd. — Mr. Erichsen punctured the tumour with trocar and canula, and two ounces and a quarter of fluid escaped. The fluid is clear, of dark-yellow colour. It gives a copious precipitate on boiling, and also on the addition of nitrate of silver. Its specific gravity is 1020, and it is slightly alkaline. The microscope shows nothing but a few blood-corpuscles and epithelial scales.

3rd.—Since the operation of tapping, patient has lost all the numbness (pins and needles) which has existed in hand and fingers for last three years.

4th.—Complains of headache and want of appetite. To take two grains of pill 5 at bedtime.

7th.—She says the tumour is becoming larger. She is not afraid of the operation. Mr. Erichsen determined to operate.

9th.—She is well and cheerful. Mr. Erichsen operated in the afternoon, removing the tumour. The patient has since done well.

Now before proceeding to describe the operation let us pause here and consider the diagnosis of the tumour.

Diagnosis.—This part of the case is exceedingly interesting from two points of view: first, so far as the diagnosis of the nature of the tumour is concerned; second, so far as the diagnosis of the anatomical relations and connexions of the tumour is concerned. Because on the proper determination of these points the question of the propriety of operation depended.

1st. It was evident at first sight that the tumour was not malignant, for the following reasons. It had existed for many years without constitutional contamination. There was no enlargement of the glands in its vicinity. The skin was unconnected with it, and was not infiltrated. The patient's health was good. We set aside, therefore, the question of malignancy. But, if not malignant, what is it? This question is much more difficult to answer. It is not a

question of pure pathological interest, for some of the steps of the operation depended on it. Is it enchondroma, or some variety of fibroid tumour? Had it been enchondroma, the great probability was that it sprang from and was connected with bone. If fibroid, it probably was unconnected with bone by pathological relations, however intimately connected with it anatomically. We were for some time in doubt on this point. One day I thought I felt deep fluctuation. I made an exploratory puncture, and drew out some cystic fluid. This was conclusive, to my mind, that it was not enchondroma. Fluid is never found in enchondroma, unless this is in a state of disintegration. And this fluid was not the result of the internal disintegration of the tumour. Therefore it was evident that it was a fibro-cystic tumour of considerable bulk. Without going further in the diagnosis, I satisfied myself that it was not enchondroma. So far the ground was clear.

2nd. The next point, very important, was the anatomical connexion of the tumour; for it was near important parts. There were two points especially to which we had to direct our attention:—First, its connexion or not with bone; second, its connexion with bloodvessels.

There were three possible bones from which it might have grown, or with which it might be connected: the clavicle, one of the upper ribs, or the scapula.—*Clavicle:* It was evident from the cleanness of its outline, and from its mobility on the tumour, that it could not have sprung from this bone.—*Rib:* This point was not so clear. The tumour extended between the clavicle and the upper ribs; so that it was just possible that it might have sprung originally from one of them. This view was a little strengthened by the fact that the axillary vessels had been thrust down three inches by the growth of the tumour. On the other hand, the tumour, though close to the ribs, did not seem to be connected with them, but appeared to be slightly movable over them; so that we hoped for the best. *Scapula:* There was a certain degree of probability in its connexion with this bone. In the minds of some surgeons who had very carefully examined it, this approached a certainty. It was thought that it sprang from the subscapular fossa, and had grown forwards; for the scapula of the right side was drawn considerably forwards in advance of the other scapula. The chest-wall was pressed in on that side. On moving the tumour, the scapula moved with it. All these circumstances tended somewhat to the probability of its being connected with the under surface of the scapula. But, strong as these circumstances might be in some degree, they never influenced me in the consideration of the osseous connexion of this tumour. If it had grown from the scapula, I could not but think it would have perforated so thin a bone, forming a tumour in the back. Probably one of the edges of the scapula would have been involved; but the edges of the scapula felt normal, clear, and defined. I thought the muscles connected with the scapula were strongly put on the stretch, and thus drew the bone forward, occasioning the displacement that was so marked.

The other point of importance to be considered was its connexion with vessels and nerves. On careful examination the subclavian artery could not be felt above the clavicle, this bone being pushed upwards. The axillary artery escaped from beneath the clavicle, at the junction of its inner and middle thirds, and coursed down over the upper part of the tumour, three inches or more below the clavicle. It then ascended on the outer part of the tumour, and entered the arm about the normal level, forming a crescentic arch with the convexity downwards. From this vessel an artery as large as the radial coursed over the outer side of the tumour. On its surface were many large veins opening into the axillary vein. Above the axillary vessels could be felt part at least of the brachial plexus. The parts were much stretched. When the pectoralis major was put on the stretch its edge could be felt running over the upper third of the tumour.

In the absence of any osseous connexion, and the certainty that it was not an enchondroma, there was no reason to hesitate to remove the tumour. Having explained the state of the case to the patient and her husband, and obtained their consent, I proceeded to operate on Wednesday last, November 9th.

Operation.—The first incision commenced at the middle of the axilla, as high as possible, and from thence carried inwards and somewhat downwards an inch and a half below the axillary artery. From the upper part of this another incision was made downwards for six inches along the outer part of the tumour, nearly in the lateral mesial line of the body. I dissected back easily the flap thus formed, and then the pectoral muscle with the axillary vessels and plexus. The anterior and lateral aspects of the tumour were thus exposed, and the more important structures were kept out of the way. Mr. Heath carefully looked to these vessels during the operation; Mr. Hill also ably assisted me. I felt a thick capsule enveloping the tumour. It was composed of muscular tissue condensed and infiltrated with plastic exudation, and was as thick as the hand. The outer and anterior part of this was turned back, and the tumour exposed. This was then separated from its attachments, by the hands chiefly, the knife only being used to divide bands of firm adhesions. Thus the upper end of the tumour was separated from under the clavicle, and drawn down. On dividing the capsule freely, the tumour shelled out from under the scapula and from the ribs easily. On removing the tumour, a portion of the serratus magnus was found adhering to it. There was another piece of this muscle, about as large as the hand, lying loose in the wound, which was then removed. Thirteen vessels were tied, several of which were large veins running into the axillary. The flaps were then secured with silver-wire sutures, and washed with carbolic-acid water.

The patient is going on well. In connexion with her present state, it may be mentioned that the sight of the right eye was impaired before the operation. Since the operation she says that she can see very well with that eye, and this statement is confirmed by the nurses, who say that her sight has certainly improved. This is a very interesting fact; and whether it arose from the removal of the pressure on the veins, or from the relief of some sympathetic influence exercised by the stretching of the nerves on the sight, I will not now stop to discuss, reserving the matter perhaps for a future occasion.

Characters of the tumour on removal.—It had something the shape of a truncated sugar-loaf, broad below, tapering above. It was of a pale rosy tint on the surface. When a section was made through it, we found—1. A large quantity of serum oozed out, not from any distinct cyst, but from a general œdematous condition of the tumour, or possibly from small collections of fluid. 2. The tumour had a peculiar glistening aspect. It varied from an opaque, glistening white, to an opalescent tint, like the hard-boiled white of a plover's egg, through various shades of yellow to patches of brownish or chocolate discoloration, the whole singularly smooth. 3. It weighed 3¾ lb. after removal, and after the draining away of much serum. What were the true characters of this growth? It was evidently of a simple nature. It would appear as if it were a tumour that had undergone some changes by a process of adhesive inflammatory action going on within it. Mr. Henry Arnott was kind enough to examine the tumour microscopically for me, and he says that the opinion we originally formed of it, from its naked-eye characters, is correct—viz., that it is fibro-plastic; that throughout most of its bulk dense masses of spindle-shaped cells are met with, embedded in a homogeneous stroma, which is fibrillated in parts. These cells traverse the tumour in all directions in a tolerably regular manner, though here and there arranged in disordered groups. There is generally much tendency to formation of fibrous tissue, but only well developed in a very few places.

These are the chief points to which I wish to direct your attention in connexion with this very important and interesting case; but before leaving it, I wish to say a few words to you on the subject of primary tumours in the axilla.

It is of great importance, in considering the subject of primary tumours of the axilla, to bear in mind that these tumours have nothing to do with the mammary gland. This is the fourth simple tumour you have seen me remove this session from the axilla, unconnected with the mammary gland. One of these cases was that of a woman who had a smaller fibro-cellular tumour removed from the anterior fold of the axilla. She subsequently died suddenly of a fatty heart. Another was a case of ordinary lipoma, or fatty tumour. And about a fortnight before I removed a large tumour from the axilla of a young woman. It was an albuminoid enlargement of the axillary glands, such as is met with in delicate young women. These albuminoid

glandular tumours are hard and smooth. They are loose and freely movable; they are moreover nodulated. It had existed probably for some years, slowly growing. On making an incision, and dissecting and enucleating, you find that it is composed of a congeries of enlarged glands, which have undergone albuminoid hypertrophy. It gradually enlarges, is pinkish white, glistening when cut, and infiltrated with albuminoid material.

This is an intrinsic and primary disease of the glands, and has no connexion with irritation of the hand or breast. It is primary, not secondary. In these cases iodine has been generally and fruitlessly used to a considerable extent before the case comes to the knife. Are iodine frictions of any use in such cases? I say decidedly, as the result of many years' experience in and out of hospital, that iodine possesses no specific influence whatever over these chronic glandular enlargements; and that any good effect produced by its external use may with equal justice be attributed to the substances with which it is mixed, but above all to the friction that is used;—in fact, that any greasy stimulating material well rubbed in would do as well. In the early days of the employment of iodine it was said that the mamma and testis might be absorbed by it. That fear has long since vanished from the minds of surgeons. It is still often believed that "tumours" may be removed by its inunction. That belief I hold to be equally unfounded.

ON THE PRODUCTION OF HÆMORRHAGE, ANÆMIA, ŒDEMA, AND EMPHYSEMA IN THE LUNGS BY INJURIES TO THE BASE OF THE BRAIN.

BY C. E. BROWN-SÉQUARD, M.D., &c.

MY object in this short paper is to call the attention of practitioners to some experimental facts, which, in connexion with a great many clinical facts, show how frequently the lungs are altered consecutively to a lesion of the brain. In making experiments on the comparative lethality of injuries to the left and the right sides of the brain, I found, a year ago, that one of the most frequent causes of death, when it does not occur immediately or very soon after wounds of the brain, in guinea-pigs especially, was pneumonia. I was led by this fact to perform a large number of experiments to ascertain the immediate effects of an injury to the brain on the lungs. The results obtained were startling; in almost all cases of injuries by crushing or section of the pons Varolii ecchymoses were found in the lungs. Sometimes the whole lung was crowded with effused blood, and real pulmonary apoplexy existed. In some instances the effusion took place in the bronchial tubes. Injuries to other parts of the base of the brain, especially the crura cerebri and the crura cerebelli, sometimes are followed by the same effects on the lung, and it is extremely probable that a slight pressure upon the pons Varolii by effused blood is sufficient to produce it. Injuries to the medulla oblongata and to the spinal cord have but very rarely (only in three or four experiments out of a great many) caused an effusion of blood in the lungs. This is the more remarkable that, without any doubt, the nerve-fibres going from the pons Varolii to the lung, which cause the rupture of small bloodvessels in this viscus, pass through the medulla oblongata and the cervical part of the spinal cord. Many experiments have shown me that it is not through the par vagum, but through the sympathetic nerve, especially by its spinal roots, which throw themselves in the first thoracic ganglion, that the peculiar influence of the irritated pons Varolii exerts itself in producing a pulmonary hæmorrhage.

Many experiments, some of them made with the help of an ingenious physiologist, Dr. J. S. Lombard, of Boston, U.S., have shown me that the condition of the lung, as regards distension or collapse of the air-cells, does not materially change the effect produced on the lungs by the crushing or a wound of the pons Varolii. I have filled the lungs (the thorax opened sometimes) with as much air as insufflation could push in, and seen ecchymoses, small or large, appear at once, or almost at once, after the irritation of the pons. On the other hand, I have withdrawn as much as I could the air contained in the lungs, and ascertained that ecchymoses appeared then as in the preceding experiments from the same cause. It is not essential at all that there be a continuation of breathing after an injury to the pons for the production of hæmorrhage in the lungs. Indeed, in all the cases of crushing, and in a great many of the cases of section, of the pons Varolii which I have performed, the kind of syncope which I have described as the respiratory syncope (inhibition of respiration) exists at once after the lesion, and notwithstanding this complete cessation of respiratory movements, the breaking of small bloodvessels takes place in the lungs.

A lesion in one of the lateral halves of the pons produces generally a much greater effect in the lung on the opposite side than in the one on the same side.

The above experiments have been made on guinea-pigs; but in two rabbits and three cats I have found that the section or the crushing of the pons Varolii produced also a hæmorrhage in the lungs.

A hæmorrhage is not the only immediate effect that can be observed after an irritation of the base of the brain by crushing or cutting: an anæmic condition, œdema, and emphysema can also be produced. Some small parts of the lungs are found perfectly white, and, according to the examination of a distinguished micrographer, M. Rauvier, who has kindly helped me in some of these researches, absolutely deprived of blood, no doubt through a spasm of the bloodvessels having emptied them of their contents. This may occur after injuries of almost all the parts of the base of the brain, but especially the pons Varolii. Not so as regards œdema, which principally appears after an injury to the medulla oblongata. Looking at a lung in which such an alteration exists, one observes one or several greyish spots, generally circular, and of the size of the head of a pin, protruding as a part of a sphere from the surface of the lung. This pearl-like part of the lung, according to my able friend, M. Rauvier, contains a good deal of serum, and its minute bloodvessels are filled with the white corpuscles of blood, and free from red corpuscles. This is, indeed, a most wonderful fact, and the more so that this change in the contents of the pulmonary capillaries is immediate.

The last effect I intend to mention of an injury to the base of the brain on the lungs is already known to experimenters, I mean emphysema. But what I will state about it is a new and very remarkable fact, which does not agree with the reigning theories of the mode of production of emphysema. It is that this morbid condition can appear when not a single respiratory movement takes place, after an irritation of the base of the brain either by crushing or cutting.

When I publish the details of my experiments on the influence of injuries to the brain on the lungs, I will show that, in man, diseases of or injuries to the brain very frequently produce organic alterations in the lungs. I will content myself here, to prove the frequency of that morbid influence of the brain on the pulmonary organs, to state that, out of 188 cases of organic disease of the brain recorded by Calmeil,* there was a morbid state of the lungs, especially inflammation, in more than sixty cases—i.e., in one case out of three. I have no doubt that many patients attacked with brain diseases die from a disease of the lungs caused by that of the central organ of the nervous system.

January, 1871.

LIVERPOOL continues to experience a much higher death-rate than London from small-pox, there having been thirty-six fatal cases in the former city last week, while the London ratio of fatality would only give about half that number. The death-rate of Liverpool from all causes was last week 20 per 1000 in excess of that of London; out of a total of 489 deaths, 165 resulted from zymotic disease, including 35 from fever, of which 19 were cases of relapsing fever.

* Traité des Maladies Inflammatoires du Cerveau. Two Vols. Paris, 1859.

ON

TYPHOID OR ENTERIC FEVER IN INDIAN GAOLS, AND ON THE RELATIONS OF THAT DISEASE AND OF CHOLERA TO THE DRY-EARTH SYSTEM OF CONSERVANCY.

BY GEORGE ROLLESTON, M.D., F.R.S.,
LINACRE PROFESSOR OF ANATOMY, OXFORD.

DR. BUCHANAN, in the Appendix (No. 4, pp. 96, 97, 106) to the Twelfth Report of the Medical Officer of the Privy Council (for 1869, published in 1870), has thrown doubt upon the validity of certain reasonings of mine (in THE LANCET, March 20th, 1869, pp. 411, 412), as to the possibility of a dry-earth system of conservancy favouring the spread of typhoid (or enteric or pythogenic) fever. One of my arguments having been based upon the fact that fever spread in the gaols of India in spite of the introduction into them of that system for dealing with excreta, Dr. Buchanan objects that this argument is of no cogency unless it be shown that the Indian fever in question is enteric and not typhus fever. When I wrote I was of opinion that this Indian gaol fever was enteric and not typhus, and further investigation has confirmed me in this belief.

In 1869 I did not think it necessary to lay any emphasis upon this point, for I thought it was a settled, received, and established belief. Dr. Murchison, in his chapter on the Geographical Distribution of Typhus Fever" (p. 58 of "A Treatise on the Continued Fevers of Great Britain," 1862), had said that there were "no authentic records of typhus, such as we see it in this country, having been met with in Asia, Africa, or the tropical parts of America." If, in the same connexion, Dr. Murchison allows that the "Pali disease" and the true bubonic plague may be analogous to, if not identical with, typhus, I have to say that between typhus as thus locally represented and the gaol fevers as described in the Indian gaols there is scarcely a single point in common; and if Dr. Morehead's suggestion, which Dr. Murchison thinks "not unreasonable," as to the superaddition of an infectious to a malarious factor in the formation in such cases as those of the Agra gaol, be accepted, I have to say, in the second place, that it makes my case the stronger instead of weaker. For what we *know* of such combinations of an "earth-born" or "earth-sown"—to use Dr. Bryden's expressive synonym for *malarious* poison—with a personally infectious element is based upon experience of two diseases only—typhoid, to wit, and cholera,—and of these two diseases precisely it is known that they spread "by the operation of decomposing excreta." We *suppose* the same to be the case with dysentery. But I must say that the supposition of remittent fever beoming infectious appears to me to be purely hypothetical, and, as yet at least, far too unsubstantial to carry even the weight of an objection without tottering.

Boudin, Guyon, and La Roche are quoted by Keith Johnstone, in the second edition of the "Physical Atlas of Natural Phenomena," 1856, pl. 35, p. 121, to the effect that "typhus" was limited to the northern temperate zone. The date of this work reminds me that in those days it was thought necessary (as by myself in a Report on Smyrna, p. 59) to insist on the reality of the distinction, then a comparatively novel one, between typhus and typhoid fevers; and I have referred to Keith Johnstone's article, not so much for his own or his authorities' opinions as to what they called typhus, as for the sake of quoting his valuable and suggestive, even though not wholly accurate, remark—"The geographical and climatal limits of typhus in Europe and America will be found to correspond nearly with those of the glutinous Cerealia and potato." The organic world, whether pathological or physiological, whether animal or vegetable, must be looked at as a whole. Facility in colligating facts can always be obtained; the power of detecting their *rationale* can sometimes be obtained by the employment of this method. I should not, however, accept Keith Johnstone's suggestion of this particular geographical phytographical correspondence; a nearer, though still only partially correct, boundary would be obtained by taking the northern limit of the Palmaceæ as the southern limit of true typhus; a botanist who would supply us with a botanical expression for the words "annual isotherm of 68° Fahr." would very nearly meet the case.

Leaving now the subject of typhus and its existence or non-existence in India, and coming to the question of typhoid fever, I must express my surprise at Dr. Buchanan's having said (p. 106) that "nothing about enteric fever can be brought into evidence from India"; for Dr. Murchison quotes a cloud of authorities (p. 407 *op. cit.*) in support of his statement that "in India it is now known to be far from uncommon"; and I suppose that a disease not uncommon outside may be taken as likely to be not uncommon inside the walls of gaols. I will quote one authority whom Dr. Murchison has not quoted—namely, Dr. James Annesley, the author of a work on the "Causes, Nature, and Treatment of the more prevalent Diseases of India and of Warm Climates generally," a first edition of which appeared with plates, and in quarto, in 1828, and a second without plates, in octavo, in 1841. At page 457 of the first edition, and page 547 of the second, under the head "On Organic Changes in Fevers," I find the following words, for the latter part of which plate xxii. of the first edition furnishes a good illustration. "Marks of disease of the large and small intestines are generally confined to their internal tunics. The duodenum, jejunum, and ileum, especially the duodenum and termination of the ileum, very frequently are diseased in their mucous surface, which is inflamed in patches, sometimes covered with a muco-purulent secretion and studded with small ulcerations, particularly the termination of the ileum. Occasionally the mucous surface is of a brick-red or purplish shade of colour, apparently ecchymosed, and covered with a bloody sanies, and readily detached from the subjacent texture. In several cases the ulcerations—which sometimes are large and far apart, at other times small and agglomerated, especially the former—have nearly penetrated the tunics of the intestines, and, in a very few cases, I have observed this occurrence actually to have supervened, the contents of the bowels being partly effused into the peritoneal cavity, and having produced peritonitis."

I come now to evidence which, as being of more recent publication than my communications in THE LANCET of March, 1869, was not available when I wrote, but which shows beyond all doubt that enteric or typhoid fever is one at least of the gaol-fevers of India. In Dr. De Renzy's last Report on the Sanitary Administration of the Punjab* (for a recently received copy of which I am indebted, as I imagine, to his kindness), I find, at page 127, the following statement relative to one of the gaols brought forward in evidence by me, in THE LANCET, in March, 1869:—"In an extract from Dr. Fairweather's valuable report on the fevers which prevailed in the spring of the year in the Rawalpindi gaol, which is printed, will be found conclusive proof that typhus fever must henceforth be regarded as one of the endemic diseases of that district." On the next page we find that Dr. De Renzy uses the most modern nomenclature, and contrasts typhus with typhoid and relapsing fevers. Upon reading this, I determined to come forward, though a most "unwilling witness," † yet without delay—as, from not having seen any notice of this Report, I believed, and believe, I must have been one of the first persons in England to receive a copy of it,—and state that I had received information which led me to believe, in accordance with Dr. Buchanan's suggestion, that typhus—a disease as little, though also as much, affected in its contagiousness and spread by the use of earth-closets as small-pox—did really exist, though alongside of typhoid, in one of the Indian gaols of which I had written. But on turning to Dr. Fairweather's Report, at page 80 (Appendix) of Dr. De Renzy's

* For 1869. Published at the Lawrence Press, Lahore, 1870.

† I see from one of Dr. Buchanan's notes, p. 96, that some objection can be raised to my employment of the words "an unwilling witness" when speaking of a person who, like Dr. Mouat, comes forward and publishes, with the truthfulness which we expect and find in such officials, facts which are, or seem to be, scarcely reconcilable with theories he has advocated. I am not aware that ordinary usage attaches any offensive insinuation to the words alluded to and employed above. Still I may express regret for having employed a phrase which could be misinterpreted. After a "very critical reading," however, of my letter in THE LANCET of March 20th, 1869, I think that another of my expressions used there does require amendment. Though John Hunter said that nothing was so difficult as to know when a fact was a fact, I still am sorry that I said that Dr. Mouat's *facts* had been called in question, as that expression does, I must acknowledge, admit of a harsh interpretation. I do not suppose Dr. Mouat puts this upon it; I should regret it if any future commentator should do so.

volume, I could not thereby convince myself that it did furnish conclusive proof of the existence of typhus in that gaol. In Dr. Fairweather's Report notes are given of eight cases, of which five only ended fatally, and with a post-mortem examination. Of these five fatally ending cases, we find it recorded of one (Case 6) that "his symptoms were more those of enteric than of typhus fever"; and as the intestines, in the account of the post-mortem examination, are described as "having the lower part of the ileum one mass of ulceration, enlargement and thickening of Peyer's patches," we need only remark that the diagnosis formed during life was very abundantly confirmed by the autopsy, but that neither seems to prove that the case was anything but what it was supposed to be—namely, enteric fever. A second of the five died with general peritonitis, consequent upon perforation of the intestine of one of "three small corroding ulcers in ileum, one on ileo-colic valve, one a few inches further back, and a third about a foot from ileo-colic valve." The mesenteric glands are stated to have shown no signs of disease; but the man had been ill six weeks; and this fact, which explains the former one so far as it needs explaining, is at the same time incompatible with the hypothesis of typhus, and explicable upon that of typhoid. Of the third of the five cases (Case 7), it is recorded that he was admitted into the hospital on April 7th "with continued fever, and all that can be recollected concerning him is that he was much troubled with cough and with pain in the right side." The man died on June 5th, and the autopsy revealed tubercles crowding the left lung, vomicæ in the right, and ulcers with elevated hardened edges in the ileum. This appears to have been a case of tuberculosis. Two of the five fatal cases (Cases 3 and 4) remain to be dealt with. In neither of them was there any intestinal or mesenteric mischief; and neither of them, therefore, could have been "enteric" fever. The persistence of typhus spots is about the only post-mortem appearance pathognomonic of typhus; and this is said to have been absent in one of the two cases (Case 3), whilst of the other case (Case 4) we are told it began as "intermittent fever." With regard to the three remaining cases of the eight in which there was a favourable termination, it is more difficult to speak positively either way as to typhus or typhoid. But with reference to the value of the rash as a diagnostic mark, in two of these three cases, I must say, considering what we know of the protean variations which typhoid fever may, even in our chilly climate, put on as to the character of the cutaneous eruption accompanying it*—variations consisting in the development of a "scarlet rash," of "petechiæ," of "vibices," of "sudamina," in addition to the typical lenticularly raised rose-spots, that it is open to me or to anyone else to demur to any one of these cases being positively set down as certainly not enteric. With reference, lastly, to the third of the three cases which survived (Case 8) it is well to mark that the case lasted more than an entire month; and that Dr. Fairweather says of it that it looked "like a complication of a dysentery, typhus, and typhoid." Of the eight cases, therefore, which were taken as proving conclusively the presence of typhus in India, two appear to have been certainly typhoid, the post-mortem examination proving the disease to have been this; a third is the case last mentioned; a fourth appears to have been a case of tuberculosis; a fifth, though covered with eruption like that of typhus during life, did not retain it after; a sixth began as a case of intermittent fever; and the two others who survived may possibly have been cases of typhoid or of remittent.

(To be concluded.)

* See Murchison: "Treatise on Continued Fevers," pp. 474, 519; and in THE LANCET, Dec. 10th, 1870.

ON HOSPITALISM:

BEING A REPLY TO THE SERIES OF PAPERS BY THE LATE SIR J. Y. SIMPSON SO ENTITLED.

BY T. HOLMES,
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HAVING noticed in a recent number of THE LANCET the posthumous completion of Sir James Simpson's series of papers written in answer to my strictures on his original statistics of the mortality of hospitals, I feel that I cannot allow them to pass without some attempt to expose what I consider the viciousness of the method which that lamented physician chose to follow in this matter. In doing so, however, I hope that I shall not forget either the tenderness due to one so recently dead, or the respect which we all owe to so active a mind and so versatile a genius. I conscientiously believe that Sir James Simpson was entirely mistaken in his conclusions, as I am perfectly convinced that his method was devoid of all logical accuracy, and could never conduct to truth, except by haphazard; but I do full justice to the purity of his motives, and believe that he had only the good of the poor at heart. All the more do I regret the too hasty publication, particularly in the ordinary newspapers, of indiscriminate charges against that hospital system which I believe to be the most successful of all our efforts at public charity, and to shake public confidence in which would, I think, be fraught with more evil to the poor than any other injury which it would be in the power of a private individual to inflict.

In dealing with so voluminous a series of papers as that by Sir J. Simpson, it is impossible for me to take notice of all the points which he wished to establish, and which, for some reason, he christened "Propositions"; nor do I think it necessary, for many of these so-called Propositions seem to me to rest on no evidence whatever. Nor am I at all concerned to deny that amputations in private practice in the country are more successful than similar operations would be in the practice of large hospitals. Though this has never yet been proved by any reliable statistics, it seems to me natural that it should be so, considering the many differences in the cases and in the patients, all in favour of the rural population. But what I say is, that neither Sir James Simpson's first nor his second series of papers gave us any reliable information as to the real difference in the mortality, nor made any reasonable attempt to show that the difference alleged to exist depended on hospital arrangements, or could be corrected by any alteration in such arrangements.

Let us, in the first place, consider the evidence which Sir J. Simpson produced, in order to show that death after amputation is caused in a certain definite proportion of cases by hospital atmosphere. This evidence consisted merely in the comparison of two series of figures supposed to show the death-rates in private and hospital practice respectively. Now, as far as I can ascertain, surgeons generally agree in the conclusion which (if I may be allowed to quote myself) I have expressed in the two following passages. I regret that these passages and others to the like effect were not noticed by Sir J. Simpson in his observations on the publications in which they occur.

"The death-rate in these (i.e., amputations) as in other cases is, by itself, a very fallacious test of hospital salubrity."*

"It (i.e., the risk of operations in large metropolitan hospitals) is a question most difficult to settle, and which has been much obscured by the hasty method in which it has been handled by well-meaning but ill-informed writers, who have jumped to extreme conclusions from figures, I do not say not founded on, but certainly not accompanied by, facts. I deny altogether that such figures are useful for establishing a comparison between different institutions. Thus, it is quite possible that a country infirmary may have a death-rate after amputation of the thigh only half as heavy as a metropolitan hospital, and yet the metropolitan hospital may be the more healthy institution, and its practice really more successful."†

The death-rate after operations is, in fact, under the influence of a great number of causes; but no person can have practised surgery or attended such practice in a great hospital without seeing that the chief influence is the nature of the cases operated on. Sir J. Simpson has given us a prescription for reducing the death-rate of our amputations—viz., to treat them in iron sheds built on the ground. Most persons cannot help being sceptical as to the efficacy of such a measure; but I think I can give my surgical brethren a prescription whose efficacy none of them would

* Sixth Report of the Medical Officer of the Privy Council, p. 500.
† St. George's Hospital Reports, vol. i., p. 318.

doubt, and it would simply be—to reduce the number of their amputations by avoiding all the worst cases. If we were merely to allow all those of our patients who were most extensively injured, those most debilitated by previous suffering, and those who have or seem to have visceral disease, to die unrelieved, we should become the models of the medical statistician, and should achieve an arithmetical triumph, though at the expense of our patients' lives and our own consciences. I am astonished to see how many persons there are who confound success in operating with successful practice. The two things are not necessarily antagonistic, but neither are they necessarily connected. Thus, assume that 100 cases occur in my hospital practice in each of which amputation ought to be practised, but that I reject the worst 50 of them, allowing the patients to die, and lose only 5 out of the 50 amputations. My success is equal to that of Sir J. Simpson's list; and he would say my hospital is a most healthy one. But 55 of my patients are dead. Had I amputated all, with four times the rate of mortality, Sir J. Simpson would have denounced my hospital as deadly, murderous, and the like; yet only 40 would have died in place of 55. This is really what is meant by the phrase one hears so often—"the careful selection of cases for operation."

Now is this a fancy picture, or is it really true that a great number of the amputations in large metropolitan hospitals are performed as a last resource, and with only a feeble chance of preserving life, on persons already worn out with organic disease, or suffering under other (sometimes mortal) injuries? Sir James Simpson had read, and has referred to, a paper which I published in the first volume of the St. George's Hospital Reports, detailing the statistics and giving the causes of death and other necessary particulars in 300 consecutive cases of amputations of all sorts in that hospital. He passes very lightly over this paper in his "Propositions," merely intimating that he finds it irrelevant and confused. Let me beg your readers' judgment on the matter. Out of the 300 amputations, 83 died. Out of the 83 deaths, it is clearly shown in the paper that there were 14 in which the death was absolutely inevitable or was caused by other disease, and which therefore, in any sane method of reasoning, must be deducted whilst estimating the risk of amputation, whether that risk proceed from hospital arrangements or any other cause; that there were 33 other fatal cases in which the patient was so far diseased that permanent recovery was impossible, and temporary recovery from the operation very improbable; in other words, that the nature of the cases operated on in a large London hospital is so severe that in more than 15 per cent. of all amputations taken together—primary, secondary, and all—death is either inevitable or at least in the highest degree probable from constitutional causes acting before the operation, irrespective of all question of risk of amputation, of hospital influence, or anything else. Am I not justified in saying that, if it is really true, as Sir James Simpson would have us believe, that in the country a surgeon can perform fifty or sixty primary amputations together without a single death, this can only be because he has to deal with cases different from those which come before us, or because he rejects the bad cases—i.e., allows them to die without making any attempt to rescue them? Without expressing any confidence in the accuracy of Sir J. Simpson's figures—because I feel none,—I can easily believe that the results of amputation for injury in selected classes of practice—e.g., among miners and colliers—are greatly more successful than ours are in London hospitals. The patients are persons of extraordinarily healthy constitution and habits;* the injuries arise in the natural course of their work, and are probably always limited, at least those for which amputation is practised. On the other hand, the urban population contains a large proportion of drunken and diseased persons; the accidents are, in a great majority of cases, the result of intoxication and occur to habitual drunkards, or they are extensive railway injuries, in which amputation is practised as a last resource, and even sometimes as a mere charity to substitute a less for a more painful mode of death. It would take much closer reasoning than Sir J. Simpson's to persuade anyone acquainted with surgery that amputations of all kinds could be practised with only 10 per cent. of deaths if over 15 per cent. of the patients were in the condition that our experience of these 300 amputations showed. The operation of amputation is a severe injury, and must involve some risk in itself, even apart from operative accidents. Sir J. Simpson himself would hardly have said that so formidable an operation, whether in the country or elsewhere, can be not merely free from danger, but absolutely reviving to a patient worn down by intemperance or sinking under visceral disease. If these considerations be irrelevant, I must confess that I do not know what relevancy means. If the paper referred to was confused, that was my fault. I hope I have succeeded better in explaining myself now; and I think these considerations sufficiently show that, if we admit Sir J. Simpson's figures to be true, or even at all near the truth, they show that the kinds of cases to which they relate must be very different from those which occur in our hospital practice. If there is not some such radical difference in the kind of practice to which the different returns apply, it seems impossible to explain their very different character. Sir James Simpson summarised them as giving a uniform average mortality. He threw strong blame upon me for saying that they are composed in large proportion (1) of the records of single cases, or very small numbers of cases, uniformly successful; and (2) of cases derived from special kinds of practice (e.g., colliers, miners, &c.) showing a success which would be unattainable in London, and which depends obviously (and, in fact, confessedly on the part of the surgeons themselves) on the high health and tough constitution of their patients, and other circumstances confined to the particular class of cases. But, in order to defend my accuracy in this particular, I need only quote the summary which Mr. Callender has drawn up of Sir J. Simpson's statistics in the fifth volume of the St. Bartholomew's Hospital Reports. The following are Mr. Callender's

"Notes on the 374 Returns from which these Figures are obtained.

"Of the 374 returns from which these figures are obtained, 217 returns give a total of 779 amputations, an average of 3·5 to each return, *without a single death*, a large number consisting of a note of a single operation (62) which recovered, or of two successful cases (59).

"157 returns give 1319 amputations, an average of 8·4 to each return. In the 1319 cases are found 226 deaths, or in the proportion of 1 in 5·8, or 17·1 per cent.

"Analysis of Returns of Amputations in Private Country Practice.

"217 returns; 779 amputations; all recovered.
157 " ; 1319 " ; 226 deaths, or 1 in 5·8; or 17·1 per cent."

Now if Sir James Simpson's reasoning from the comparison between his 374 country returns and his hospital returns was legitimate, why should we not pursue the very same reasoning process a little further, and apply it to these two classes of the country returns? Why should we not say, in fact, that returns from the 217 surgeons show amputation, when properly performed and in proper cases, to be an operation of no danger at all, and never followed by death; and that it was the want of surgical or operative skill in the 157 surgeons which caused the 226 deaths in their practice?—or else that there is a portion of the country where things are in their natural condition—the region of the 217; and there any man may have his leg or his arm cut off in any condition of health, without the least chance of dying of it; another region, that of the 157, where the odds are as 17 to 83 that death will follow; and then the region of the deadly hospital miasma, where the odds vary according to the number of the beds, as specified in Sir J. Simpson's last published tables, up to the maximum of 40 to 60 per cent. of deaths, which is reached in London hospitals? Either of these views of the case are perfectly legitimate and consistent applications of Sir J. Simpson's reasoning; and if they are too absurd to be believed out of Bedlam, this should suffice to show the fallacy of the whole method.

(To be continued.)

* See a very interesting paper by Dr. Robt. Wilson on "The Coal Miners of Durham and Northumberland, their Habits and Diseases," read before the British Association at Newcastle, 1863.

PROFESSOR HEBRA states that, from 1850 to 1860, 227,000 patients were admitted into the general hospital of Vienna; out of whom 30,000 were cases of skin affections.

THE USE AND ABUSE OF THE TERM "FEVER."

By SAMUEL WILKS, M.D.

It is high time that the public should be better informed as to the matter of "fevers"; and if it could receive a little instruction from the hands of the profession, I believe the benefit conferred on the community would be immense. We medical men know that so loose an expression as "fever" is worse than worthless—that there is no more fever *per se* in typhus, typhoid, or scarlatina, than in a hundred other diseases; and we know also that under that vaguest of all terms, and one engendered in ignorance, "common continued fever," there have been included several totally different maladies, contagious and non-contagious. Owing, however, to the fact of many specific diseases being attended by feverishness, and many of them being contagious, the words "fever" and "contagion" convey identical ideas to the minds of an uninstructed public. The practical evil arising therefrom is very considerable, for a highly contagious affection may be disregarded, whilst a slight malady attended by pyrexia may be developed into a fatal one by an erroneous method of treatment.

I am ignorant of the objects for which the London Fever Hospital was established, but I assume it was for the purpose of isolating contagious diseases. Now the only affections which are constantly with us of this nature are scarlatina, measles, small-pox, and typhus. Small-pox has already found a home, and measles is so rarely seen in the epidemic malignant form that there is never felt any need for its isolation, so that there remain only scarlatina and typhus which require to be treated in a special institution. Owing, however, to the popular view of "fevers," any disease having such an appellation is supposed to find a proper habitat therein; and, consequently, it might happen that a non-contagious disease, "typhoid" by name, might be filling the wards to the exclusion of a wide-spreading infectious malady. It would be sent to the hospital on account of its name. Absurdity could scarcely further go. Again, if a poor servant be seized with feverish symptoms, and it be not at first apparent what is the nature of her complaint, she is sent off to the Fever Hospital, and thus the physician is obliged to treat arachnitis, pneumonia, Bright's disease, or tuberculosis. This absurdity is a fitting corollary to the other.

The reform required is, I think, very simple; for since the only diseases we wish to isolate for the benefit of the community are small-pox, scarlatina, and typhus (relapsing fever being only a wanderer amongst us), and small-pox having found a refuge of its own, the fever hospitals should be used for the two latter only. And, again, since there would be no wish to send away the mildest cases of scarlatina, and as in severer ones the rash appears on the day following the feverish symptoms, a rule might be made to admit no case without the presence of an eruption. If the same were done with regard to typhus, the public and the profession would have an easy rule to guide them, and the objects of fever hospitals be more completely fulfilled. The same idea actuating the authorities of the general hospitals would dictate to them what cases to exclude, and oblige them no longer to refuse admission to the harmless typhoid on account of its name. No term in the whole range of medicine (not excepting inflammation) has, I believe, wrought so much mischief on theoretic and practical medicine as the word "fever." If anyone would propose a good substantive expression for typhoid and relapsing fevers, we might expunge the word altogether from our nomenclature, using the term pyrexia or feverishness for the febrile state; and could the originator of such names command their extension through the ranks of the profession, he would be conferring a boon on humanity.

Grosvenor-street, December, 1870.

MR. P. H. MACGILLIVRAY, surgeon to the Bendigo Hospital, reports, in the *Australian Medical Journal* for October, 1870, the successful removal of the whole tongue for epithelioma.

FEMORAL HERNIA RADICALLY CURED BY OPERATION.

By SAMUEL WOOD, F.R.C.S.

MARY H——, aged thirty-seven, of spare but healthy habit, was admitted an in-patient of the Salop Infirmary on the evening of Sept. 7th, 1869, with a strangulated femoral hernia. She stated that she had had a hernia for eighteen months, and that on the morning of the 6th, as she was lifting a small beer-barrel, the bowel came down so that she could not return it. As the symptoms were not urgent, she was ordered ten minims of dilute hydrocyanic acid in an ounce of water. There had been slight vomiting during the night previous, and on the morning of her admission taxis was tried on two or three occasions, but without success.

Sept. 8th.—Has passed a restless night, with occasional vomiting; hernia unreduced. Chloroform having been given, the sac was cut down upon, but not opened; the strictured portion at the neck was divided, and with a little gentle pressure, the contents, consisting of intestine and omentum, returned. It then occurred to me that, if I could detach the sac from its surroundings and invaginate it, and retain it in this inverted position, the raw surfaces would form adhesions, the opening be thus plugged up, and a radical cure be effected. Acting on this idea, I carefully detached the sac, and easily succeeded in pushing it through the openings and so invaginating it. In doing so, I could with my finger detect, through the sides of the sac, the opening of the crural ring and the edge of Poupart's ligament, and feel the end of my finger, covered by the inverted sac, well within the cavity of the abdomen. The sac being secured in this position, the external wound was closed with wire sutures and strips of adhesive plaster, over which compresses of linen were put, and the whole secured by a roller applied in the usual manner. Forty drops of Battley's solution were given. Has vomited once or twice after the operation, but all the urgent symptoms were relieved. In the evening the bowels were moved.

9th.—Doing well; no sickness. Beef-tea, milk, tea.

10th.—The dressings were removed, and the edges of the wound found to have united beautifully.

11th.—There is a little redness on the edges of the wound, and they appear as if they would separate; a little discharge from one part.

12th.—The edges have separated nearly the whole length, and I can see a funnel-shaped depression, with granulating sides, being the inverted sac. She was allowed some wine and a more liberal diet.

From this time the case progressed uninterruptedly; the wound filled up and healed, and a pad was kept on the part to retain it in position until the parts became consolidated. She was discharged cured, and had a truss applied. I saw her some months after, and the part appeared consolidating. She was wearing the truss, and there was no hernial protrusion. I again visited this patient twelve months after the operation; the parts had become quite consolidated, and there was no hernial protrusion.

I am not aware that this plan of permanently closing the opening, and thus radically curing femoral hernia, has ever been done or suggested before. It appears to me so easy and natural a proceeding, and one attended with so little danger, that I trust the publication of this case may induce others to try this plan of operating. It may, however, happen that I am here recording what has long ago been done by others, though I have never found any notice of such an operation.

Shrewsbury, November 29th, 1870.

TWO CASES OF INJURIES OF THE LIVER: WITH REMARKS.

By GOPAUL CHUNDER ROY, F.R.C.S.

A YOUNG Mahomedan, aged about thirty years, of intemperate habits, came under my treatment in the Nagpore City Hospital in the year 1867, with a large abscess of the liver. With the history of acute hepatitis there was a uni-

form bulging on the right hypochondrium, manifest in relief for some distance below the costal cartilages, in which fluctuation could be distinctly felt. As the patient was daily getting exhausted from fever, probably due to the irritation of the purulent collection, I resolved to give him the chance of life, feeble as it was, by letting out the matter. With the limited means I could command, I thought of evacuating the contents by tapping, and, as the abscess did not feel deep-seated, I anticipated no difficulty in reaching the cavity with the ordinary hydrocele trocar and canula, the only sort of tapping instrument I possessed. An incision was made in the skin, and the instrument was thrust in in the usual way. Great was my surprise to find thick, dark, venous blood flowing out of the canula instead of pus. It flowed in an even stream, as in the evacuation of the contents of a cyst. I soon discovered that it was hæmorrhage from the liver, and before two ounces escaped I plugged up the orifice of the canula and left it *in situ*. There was, of course, no diminution in the size of the tumour, and although there was some change for the better, the patient died exhausted three days afterwards. There was no recurrence of the hæmorrhage.

The post-mortem examination revealed a large abscess occupying the right lobe of the liver, which was melted into a uniform cyst, bounded by a wall of hepatic substance not thicker than half an inch. At the part where the instrument had entered, the wall was unfortunately thicker than the rest, and a few lines of hepatic tissue intervened between the point of the canula and the cavity of the abscess. The abscess had not formed any adhesion on its superficial surface with the abdominal wall, but was glued by recent lymph to it just around the seat of puncture. There was no effusion of blood in the peritoneum, and no peritonitis. The liver tissue around the canula was indurated by plastic effusion for two or three lines, but was not otherwise altered in appearance.

The next is a case of rupture of the liver and left kidney, in the person of a young Hindoo, aged about twenty-five years, who was admitted into the Medical College Hospital of Calcutta in 1866, during my incumbency as house-surgeon. He sustained a fall from a tree, fractured his rib, and had a compound Colles's fracture of the left arm. He was brought in a state of extreme collapse, but he gradually got over the shock. He had retention of urine, which for the first two days was uniformly mixed with blood. He had slight peritonitis, but was progressing most hopefully, when, a fortnight after the injury, the supervention of an attack of tetanus carried him off.

At the autopsy, we found the apex of the left kidney lacerated, and about half a pint of clotted blood effused around the organ. The lower end of the spleen seemed to have sustained a similar injury, but, as the organ was soft and friable, it could not be distinctly ascertained whether it was not a post-mortem change. The liver had three or four superficial rents on its convex surface, in the form of streaks, in the line of which a thin layer of decolorised blood could be discovered. The rents did not extend deeper than a few lines, and the peritoneal covering over them had not given way. There was an attempt to unite the ruptured portions by a thin layer of plastic effusion, which, on a transverse section, was seen to pass to the bottom of the fissures.

Remarks. — Injuries of the internal organs are always looked upon as serious, but they are not necessarily fatal. The danger depends primarily on hæmorrhage and secondarily on peritonitis. The rupture of a gland, vascular as the spleen or liver, floating loose in a cavity, with no arrangements within it to stop the flow of blood, would drain the system of its last vital fluid, and produce death from shock and anæmia. If this hæmorrhage could be prevented, even extirpation of the organ could be undertaken without the immediate fatal consequence. My first case would bear out the point that the liver can be punctured without any untoward results, if we could avoid hæmorrhage and extravasation into the peritoneum. The uniform stream of blood which flowed from the canula would have in no time brought on death, if the quantity had been allowed to escape unchecked into the abdominal cavity; but the canal of the tube opening outside converted in this case an internal wound into an external one, which was easy of control. Another important deduction can be made from the instance before us—that of the danger of inadvertently removing any metallic weapon thrust into the substance of any of these internal vascular organs. The presence of the instrument serves as a plug and prevents hæmorrhage. Besides, it excites adhesive inflammation all around, and not only blocks up the mouth of the bleeding vessels, but binds the organ by bands of adhesion to the wall of the abdomen. In this state, the weapon can be gently removed without any apprehension of danger; whereas, if removed in the first instance, we leave an internal bleeding wound, that would necessarily prove fatal by continuous flow of blood. In the second instance, the rupture in the liver was not deep enough, and fortunately the peritoneal covering remained untorn, so that the bleeding was stopped by the pressure of the effused clot underneath the membrane. During life-time there was scarcely any symptom to arouse suspicion of the injury of the liver; and the healing process that had advanced, together with the favourable progress which the patient was making, leave no other conclusion than that such injuries can be easily repaired if the first danger of bleeding can be averted. There are, I believe, very few cases on record of life being prolonged to a fortnight with the amount of injury the patient had sustained. Lastly, I would draw attention to the fact of the existence of a *large* abscess in the liver without the contraction of adhesion with the abdominal wall, which is often denied as an improbable occurrence.

Glasgow, December 30th, 1870.

A Mirror
OF THE PRACTICE OF
MEDICINE AND SURGERY
IN THE
HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. BARTHOLOMEW'S HOSPITAL.

CLINICAL REMARKS ON STRICTURE OF THE ŒSOPHAGUS.

(By Mr. PAGET.)

Two cases of stricture of the œsophagus, produced by the action of corrosive fluids which had been swallowed some time previously, came recently under the care of Mr. Paget, and remained for a time in his wards, while, to prevent ultimate closure of the tube, the patients were instructed in the art of passing bougies through the strictured portions.

With reference to these cases Mr. Paget made some interesting remarks on the diagnosis and treatment of stricture of the œsophagus, in the course of which he explained his views of that particular form of stricture which is usually denominated "hysteric" or "spasmodic." It was, he said, the homologue in the pharynx or œsophagus of that want of harmony between the organs of speech and respiration which produces stammering; and appeared to depend on a want of perfect concert between certain involuntary muscles and muscles under the control of the will, which are designed to act in harmony. In the latter case the muscles of respiration do not act in time and unison with the organs of speech; in the former, instead of the normal contraction of successive portions of the upper part of the alimentary tract from above downwards, which transmits the food regularly from the mouth to the stomach, there occurs an unruly contraction of certain fibres, which, as long as it continues, bars the passage of food as completely as if some permanent obstruction existed. The degree of this contraction varied in different cases: in some it only compelled the patient to take his meals apart, or inconvenienced him whenever his attention was in any way directed to the act of swallowing; while, in others, it produced contraction so obstinate and complete that the maintenance of life by means of gastric

digestion was wholly prevented. In these extreme cases recourse must be had to enemata; and, as in all other cases where nutritive materials have to be supplied to the body for more than three or four days by the introduction of food into the rectum, it would be found necessary to make use of something more than beef-tea and brandy, and, by injecting preparations containing fats, starches, sugars, and vegetable as well as meat juices, to supply all the ingredients which are contained in a natural diet, and are essential to the building up of the various tissues of the body. Of the fact that vegetable juices could thus be effectually introduced into the system, he had recently had very satisfactory proof in the case of a patient with whose nutritive enemata had been mixed some of the essence of water-cresses, proposed by Mr. Wyatt: at the end of a few days the patient had begged that the quantity of the essence might be diminished, because the flavour of that vegetable in his mouth had become so strong and so constant as to be extremely disagreeable.

UNIVERSITY COLLEGE HOSPITAL.

CASES OF STONE IN THE BLADDER.

(Under the care of Sir Henry Thompson.)

The following unbroken series of successfully treated cases of stone in the bladder, occurring within a space of about four months, gives examples of some of the expedients on which a successful issue must often depend, and affords evidence of the abundant opportunities for the study of calculous diseases which are afforded by the clinique of this hospital.

LITHOTOMY: FOUR CASES.

Case 1.—J. W——, aged sixty-five, had suffered from symptoms of stone for several years. When laid on the table for the cutting operation, it was found impossible to place him in the usual position, in consequence of deformity about the right hip, the result of chronic rheumatoid arthritis. The difficulty of the operation was increased by the great depth of the perineum; a tube had to be introduced to arrest the hæmorrhage that followed it; and during the second week the wound sloughed into the rectum. The ultimate result was that the patient had, when discharged, a small recto-vesical fistula, through which only a few drops of urine passed occasionally, and which bade fair to close spontaneously. The stone consisted of uric acid, and weighed nearly three ounces.

Case 2.—E. S——, aged one year and eleven months, underwent the lateral operation for the removal of a large urate-of-soda calculus. It was not found necessary to introduce a tube into the wound, and the patient recovered without any unfavourable symptoms. In this instance Sir Henry Thompson departed from the usual course of withdrawing the staff as soon as the bladder has been reached, by retaining it in position until the stone had been securely grasped by the forceps, assigning as his reason that, in young children, the structures concerned in lithotomy are so delicate and elastic that, when searching for the stone, the operator runs some risk of pushing the bladder before him, instead of effecting an entrance into it.

Case 3.—The patient was a very stout man of sixty-five, and had suffered severely from symptoms of stone for many years. He was sounded with a lithotrite, and found to have one large stone and several small ones. Of these latter, one about the size of a pea was crushed at once, and shown to consist of uric acid. The remaining ones were removed by the lateral operation some days later. Very slight hæmorrhage occurred during the operation, and the patient made a good recovery.

Case 4 was that of a youth sixteen years of age. A large calculus, consisting of urate of soda, was removed by the lateral operation. No tube was employed, and the patient made a good recovery.

LITHOTRITY: SEVEN CASES.

Case 1.—J. W——, aged fifty-one, had had a uric-acid stone removed by lithotrity eighteen months previously. Since then he had not been able to completely empty his bladder, and a phosphatic stone had formed in consequence. This was removed in five sittings, and before his discharge the patient was taught to pass a catheter himself, and to wash out his bladder daily with a weak solution of acetate of lead, which preparation Sir H. Thompson believes to be one of the best for obviating the tendency to recurring phosphatic calculus in patients who are unable to empty the bladder. It is found that private patients readily recognise the importance of these precautions, but that it is very difficult to induce hospital patients to observe them carefully after their discharge.

Case 2.—R. C——, a fine, hale, old man of seventy-two, had a large uric-acid stone removed in eighteen sittings. He bore this large number of operations without fever or constitutional disturbance until, after the last operation, there occurred phlebitis of the right femoral vein; but this complication did not retard his recovery for more than a few days.

Case 3.—J. P——, aged forty-eight, had a stricture of the urethra. He had been cut eight years before, and lithotrity had been unsuccessfully attempted a few months before admission. Sir Henry adopted in this case a plan he has now tried in several cases in which stricture of the urethra prevents the introduction of the lithotrite. A gum catheter is left for several days in the urethra and bladder; the lithotrite is then employed under chloroform, and the greater part of the débris is removed at once with the instrument; the catheter is reintroduced, and in six or seven days more the operation is repeated. Two stones, consisting of mixed urates and phosphates, were thus removed from this patient; and, as he was unable by his own efforts to completely empty his bladder, he was instructed in the use of the catheter before being discharged.

Case 4.—J. P——, aged twenty-three; looked pale and exhausted, and was very weak. He had a phosphatic stone, associated, as is almost always the case in young subjects, with renal disease. The stone, on being measured, proved to have a diameter of at least an inch, and the passing of the lithotrite was followed by so severe an attack of fever as to raise apprehensions as to the result of placing him under active treatment; but, as the case was urgent, Sir Henry decided on attempting to crush the stone with every possible precaution. The patient made so good a recovery from the first sitting as to be able to undergo a second at the end of a week. This, however, was followed by severe rigors and such extreme prostration that his life appeared for a time to be in danger. After a month's interval of careful nursing he underwent another sitting under the influence of chloroform, the consequences of which were less severe. In three weeks more a fourth crushing was performed; and it then became necessary to tie a catheter in the bladder to prevent impaction of the fragments in the urethra. A large quantity of débris has now been brought away, and there remain in the bladder no more than one or two small fragments, which it is anticipated will be removed without difficulty in another and a last sitting.

Case 5.—From J. R——, aged sixty, a stone, consisting of urate of soda and phosphates, was removed in four sittings in the course of ten days. He presented no bad symptoms, and was discharged well.

Cases 6 & 7.—In the sixth case two rather large urate-of-soda calculi were removed in twelve sittings; and in the seventh one of uric acid was removed in five sittings. Both patients bore the operations well.

ST. MARY'S HOSPITAL.

THE TREATMENT OF ACUTE TONSILLITIS WITH BELLADONNA.

(Under the care of Dr. Handfield Jones.)

Although many of the standard works on medicine and therapeutics omit to make any mention of the value of full doses of belladonna as a remedy in severe simple tonsillitis, its employment in this affection is not by any means novel. The following is a case in which its use was followed by a speedy recovery.

A. C——, aged eighteen, had been ill for three or four days with severe left tonsillitis. On admission, the left tonsil

and the adjacent arch were found to be much swollen and very red. The inflamed parts had been scarified with some relief, but the formation of abscess seemed to be imminent. The pulse was 100, rather weak; the temperature 100·4°. Five grains of calomel and an aperient draught were administered shortly after admission. When Dr. Jones saw the patient, he ordered twenty drops of the official tincture of belladonna to be taken in half an ounce of water every two hours. On the second day after admission the voice was much improved, and the patient had less difficulty in swallowing. On the fourth day the patient had slept soundly during the whole of the previous night; the pulse was natural, the swelling had much subsided, and she was free from all distress. On the eleventh day the tonsil appeared to the eye to be quite natural; but when felt from the neck it still seemed to be somewhat enlarged. With the exception of four-and-twenty hours, during which the doses were given every four hours, the belladonna was taken every two hours until the fourth day; the frequency of the dose was then reduced to every four hours until the sixth day, when the treatment was discontinued. It will be seen that while the dose was repeated every two hours, belladonna was being taken at a rate of about ten grains of the extract in every twenty-four hours, though some deduction must be made for doses omitted at night, especially towards the close of the treatment. Nevertheless, neither in this case, nor in numerous others in which large doses of the drug have been prescribed by Dr. Jones for the same affection, has any toxic effect been observed to follow.

Dr. Jones considers that this medication is more appropriate where the tonsils are acutely inflamed than in those cases where there is general inflammation of the fauces, without special affection of the tonsils. In the latter case he thinks that either iodide of potassium or the solution of sesquichloride of iron, according to the quality and stage of the inflammation, is preferable; and though he often combines with the belladonna a little quinine, or sulphate of magnesia, or an emetic, according to the indications of the case, and sometimes the use of steam, or a blister applied externally to the neck, he feels justified in maintaining that the success which he has attained in the treatment of these cases is not to be attributed so much to these auxiliary measures as to the belladonna. He always gives directions that the administration of the remedy shall be slackened as soon as the throat symptoms are materially relieved, or on the production of any toxic effect.

Dr. Jones does not pretend to decide whether the remedy operates by producing constriction of the arteries, or by a direct sedative effect on the elements of the affected tissue; but he proposes that, if further observation should confirm its value in acute tonsillitis, the patient should be saved the regularly recurring pain of swallowing doses of medicine, by reducing the preparation of the drug to the smallest possible bulk, or by injecting it subcutaneously in the form of atropine.

MOORFIELDS OPHTHALMIC HOSPITAL.

PARALYSIS OF THE CILIARY MUSCLE FROM DIPHTHERIA.

(Cases under the care of Mr. HUTCHINSON.)

AMONGST the curious examples of the manner in which what are called specialisms interlace with general practice, we have the forms of diphtheritic paralysis of the eye. Although for long there has been no epidemic of diphtheria in London, yet the continued sporadic occurrence of this peculiar malady is as well proven by the practice of the eye hospitals as it could be in any other department. We publish this week, from notes supplied to us by Mr. Nettleship, one of Mr. Hutchinson's clinical assistants at Moorfields, three of the most recent cases observed there. We are informed that it is rare for six months to pass over without two or three of these cases being recognised; and, as this average concerns the practice of only one of the surgeons, the total for the whole staff must be considerable. The cases are very peculiar, and are usually easy of diagnosis. The patient is almost always a child, and the defect of sight complained of has come on suddenly, and consists usually of inability to read. Sometimes, when the child's sight for distant objects has not been tested, the utmost anxiety is expressed, in the belief that the defect amounts almost to blindness. The ability to see well at a distance, and to read with the assistance of a strong glass, at once establishes the fact that the only disease is a paralysis of the muscle of accommodation. From this discovery, the next step to the inference that diphtheria must have been present is a very safe one, for no other malady produces this condition. On inquiry, it is usual to find that the child has had a month ago a sore-throat, perhaps not a very bad one; and not unfrequently there is a statement that its brothers and sisters had at the same time much more severe symptoms, whilst they have escaped the paralysis. The defect of sight never follows the sore-throat immediately, but always after convalescence has seemed to be established. The prognosis is always good, and in a month or six weeks the sight is again perfect.

CASE 1. *Paralysis of accommodation after sore-throat, with symptoms of diphtheria.*—Ann E——, aged seven years, was admitted under Mr. Hutchinson's care at the Royal London Ophthalmic Hospital, June 30th, 1870, on account of dimness of sight. Her sight had failed for about two weeks; she had found that she could not read. Her vision was fair ($\frac{6}{18}$) for distance, but very defective (14 J.) for reading; with a weak convex glass she could see $\frac{6}{6}$, thus showing that she was a little hypermetropic, while she required convex 11 in order to read 1 J. (brilliant.) Her pupils acted well to light. Her urine was pale, clear, and contained no albumen. Her mother stated that about six weeks previously the patient sickened after feeling very cold (probably a rigor). She was very languid and weak, and lost her appetite, and she then suffered from a bad sore-throat and swelling of the glands under the jaw. She was ill about two weeks. There was no history of contagion, but the mother said that scarlet fever was very prevalent in the neighbourhood of her home. The patient had never had scarlet fever.

CASE 2. *Paralysis of accommodation after sore-throat (diphtheritic); no history of contagion.*—Ellen L——, aged fourteen, applied at the Royal London Ophthalmic Hospital, on November 10th, 1870, complaining of dimness of sight; this symptom had been present about five weeks. On examining her it was found that she could see perfectly ($\frac{6}{6}$) in the distance, but that for reading her vision was very defective (12 J. at 12 inches); her pupils acted well. Her mother stated that, seven weeks before, the child had been taken ill with some shivering, followed by sore-throat, swelling under the jaw, and great bodily weakness. She had had no rash. Her sight began to fail about a fortnight after the sore-throat came on, and at the same time it was noticed that she spoke "through her nose," and that liquids sometimes returned through the nose, instead of being swallowed. No history of scarlet fever or of sore-throat in other members of the family, or acquaintances, could be obtained. She had not had scarlet fever. She took quinine mixture, and was quite well in a fortnight.

CASE 3. *Paralysis of accommodation after ulcerated throat (diphtheritic); history of contagion.*—William John R——, aged eight years, a pale weakly child, was admitted on December 1st, complaining of imperfect vision. His mother stated that he had been complaining of his sight for about three weeks. His vision was very imperfect, both for distant objects ($\frac{6}{36}$), and for reading (18 J.); it was found that he was highly hypermetropic (requiring convex 6 in order to see $\frac{6}{6}$), but that he had failure of accommodation also, for he required convex 4 in order to read 1 J. (brilliant) at ten inches. His pupils were not dilated. The history obtained was to the effect that five weeks previously he had had an ulcerated sore-throat, his neck had swelled, and he had been very weak; his mother also stated that "a sort of skin of yellow matter" came away from his throat. There had been no symptoms of paralysis of the soft palate. He had not had scarlet fever. On admission his urine contained no albumen. Two weeks before the patient's illness his younger brother, aged four years, had a somewhat similar attack of ulcerated throat; he had not had scarlet fever. Lastly, about ten days earlier still, an aunt of the children, who had just before come up from the country on a visit, had an ulcerated throat; this aunt was believed to have had scarlet fever in childhood.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, DECEMBER 20TH, 1870.

DR. QUAIN, PRESIDENT, IN THE CHAIR.

AN interesting case of Pityriasis Pilaris, as described by Devergie, was brought before the notice of the members of the Society by DR. TILBURY FOX. The patient, a man aged forty-nine, was attacked six months since with pityriasis rubra of the whole surface, the integuments being deeply congested, and subsequently throwing off branny scales, and then lamellar flakes, but without there being any discharge whatever. After a while the skin showed a disposition to return to its natural appearance in certain parts, especially about the belly, the back, the shoulders, and upper arms, and here all that now remains is plugging of the hair-follicles by little masses of epithelial cells, so as to give rise to the appearance of the skin being studded all over with little pale-red or white elevations, the size of pin-heads, whilst the integuments have the feel of a rasp on passing the hand over them. In the other parts of the body the appearances were those of pityriasis rubra. Dr. Tilbury Fox explained the difference between this condition of things and lichen ruber and psoriasis, and stated that the case bore out the truth of the description given by Devergie.

MR. SPENCER WATSON showed, for Dr. J. Swift Walker, a specimen of sarcoma of the leg. The tumour, at first the size of a filbert, was removed on four different occasions on recurrence. After the last two operations the growth became very vascular and fungoid, and bled much. The microscope showed it to be a spindle-shaped sarcoma.

In reply to Mr. Arnott, Mr. Watson said that in the later growths there was an increasing tendency to the replacement of the spindle by oval-shaped cells.

MR. SPENCER WATSON exhibited an Eyeball with a bony cup lining the sclerotic and a calcareous deposit on the cornea, removed for sympathetic ophthalmia. The eye had been impaired twenty-five years before by a blow, but had only recently become painful and given rise to irritation. The bony cup presented the aspect of true bone under the microscope. It was one-eighth of an inch thick in several places. The lens was converted into a hard and brittle porcellaneous material, without any cellular structure. The deposit on the cornea consisted of calcified epithelial cells, which retained their form and structure after immersion in strong acetic acid.

DR. GREENHOW showed the Spinal Cord from a case of locomotor ataxy, under observation five years, in an epileptic patient, aged fifty-seven, who had been subject also to delirium tremens and rheumatic fever. When first seen the patient had a staggering and unsteady gait, pain in the lower limbs of a recurrent character, having shocks for hours at a time in one place, at other times the pain would suddenly appear at a different part. The pupils were contracted, the focal distances of the eyes different, ophthalmoscopically the optic discs were pale; the special senses were disordered; the general sensibility impaired; the reflex function heightened. The urine contained pus, and hæmaturia was occasionally observed, and for some time before death the patient could not move or raise himself in bed by his own unaided efforts. At the post-mortem the left kidney was pyelitic, the bladder inflamed, thickened, and congested. The skull-cap was thickened, as was the arachnoid, which also contained an excess of fluid. The brain was healthy. The spinal cord was small; its texture was firm, and on section this was more apparent in the posterior column, which was infiltrated by a semi-transparent tissue. Microscopically the nerve matter was seen to be replaced by a new fibro-cellular tissue, and many amyloid bodies were observed to be present. The arteries were hypertrophied. The posterior roots of the nerves were thickly studded over with corpora amylacea. In the antero-lateral columns of the dorsal region the superficial layers of the cord were similarly affected. The degeneration of the cord was less marked in passing from below upwards. There was no change observed about the optic nerve and commissure, save hypertrophy of the vessels. The nerves of special sense could not be examined, as the examination was undertaken with great difficulty.

MR. JAMES ADAMS exhibited a Cranium presenting large Exostoses of Bone, taken from a man, aged forty-nine, who had originally received an injury of the head, and, as a consequence apparently, had been seriously ill for some time. There was no impairment of intellect. One growth was connected with the ethmoid, and encroached on the nose; there were two small ones on the front of the lower jaw, the whole jaw-bone being enlarged, especially the coronoid process, the condyle to three times its normal size. The palate, the external pterygoid, the hamular process, and the malar bones were likewise the seats of bony outgrowths, as well as the parietal bone, the parts about the glenoid cavity, and the occiput. No microscopical examination had been made.

MR. ADAMS likewise showed a specimen of Tubercular Testis, and MR. ARNOTT also brought a specimen of this disease for exhibition. The latter gentleman mentioned the similarity of microscopic structure presented in the early stage by syphilitic, and strumous, and orchitic testicles. The testicle structure was separated by a fibro-nuclear tissue, which seemed to break up in one case into pus, another into cheesy matter, and another to undergo a fibroid change, so as to produce tissue like the gummy syphilitic masses.

A member of the Society exhibited the Lungs of a Porpoise filled with Worms, encased in such a way as to resemble tubercular deposits.

MR. HULKE spoke of the commonness of this condition.

DR. CRISP said the worms were strongyli.

DR. DICKINSON exhibited a Cystic Tumour which had originated in the lumbar glands, or their immediate neighbourhood. Dr. Dickinson exhibited last year a large encephaloid tumour which had taken its origin in the lumbar glands, and then pointed out the close resemblance between a tumour in this situation and one originating in the kidney. The form and relations of the swelling in the present instance so closely resembled those in the previous case, that it was concluded during life that the tumour had, as in the previous case, started in the lumbar glands. This view was confirmed by the existence of a swelling in the scrotum, apparently connected with the testicle. The specimen was taken from the body of a boy three years of age, who died in the Hospital for Sick Children. At birth he had what was supposed to be a scrotal hernia, and at the same time some soft protrusions were noticed in the right loin. Eight weeks before death, it was observed that the body was increasing in size; and a fortnight later the child was brought to the hospital. There was now a swelling, which in parts fluctuated, occupying the right side of the abdominal cavity from the thorax to the groin. At its lower end it passed across the middle line, and extended into the left iliac region. Intestine could be felt in front of this mass, which was clearly placed behind the peritoneum. The scrotum was much enlarged, and contained solid matter and fluid. A quantity of intensely albuminous fluid had been withdrawn by tapping from the scrotum by Mr. Smith before Dr. Dickinson saw the case. After remaining about a month without material change, the child became prostrate, and a week later died. Towards the end the tumour was observed to have considerably shrunk. The post-mortem examination showed a large cystic mass lying behind the peritoneum, on the right side of the body, reaching from the diaphragm to the groin, and thence downwards into the scrotum. Microscopically the mass proved to consist of fibrillating and spindle-shaped cells, mixed with fibrous tissue. The cells were of large size; some of them were curiously lined by the tissue of the adjacent muscles, so that they had an appearance remarkably resembling the interior of the auricles of the heart. The peritoneum contained serous fluid, and gave traces of recent inflammation. One of the cysts had apparently burst, and its contents become diffused. The peritoneum was sprinkled with minute, superficial, easily detached specks, which had a structure similar to that of the larger growth. It seemed that they had resulted from cells or germs, set free by the bursting of the cyst, attaching themselves in a parasitic manner to the surfaces with which they came in contact. Dr. Dickinson referred to a case which he brought before the Society ten years ago, in which

a similar dissemination had followed the bursting of a cyst containing colloid matter. The resemblance was of interest, as showing that, in independent vitality, an important element of malignity, the fibro-plastic growth, closely resembles the cancerous. The scrotum contained a portion of a large cyst, which reached into it from above. The testicle was natural. It was clear that the growth had originated in the lumbar glands or their immediate neighbourhood, so far confirming the diagnosis. The kidneys and supra-renal capsules were unconnected with the growth. The swelling being found both in the loins and scrotum at birth, suggested that the tumour, originating in the loins at an early period of fœtal life, had been conveyed into the scrotum by the descent of the testicle. It was not possible to be sure whether the growth had originated in the glands themselves, or in the areolar tissue in their vicinity; the lumbar glands could not be made out distinctly from the tumour, while at the upper end of the growth were some nodulated masses which suggested a glandular origin.

Dr. SUTTON sent round a Fœtus which was supposed to be the subject of congenital small-pox. There were dark-red spots on the skin, and dried-up pustules; and on the liver and lungs yellowish spots of fibroid-looking tissue, which were made up of granular matter, and irregular-shaped cells.

Dr. MURCHISON said he saw cicatrices in some parts about the body, and if so, they would mean that the small-pox pustules were much more advanced there than at other parts of the face. This and other facts showed that it could not be small-pox.

Dr. TILBURY FOX said there could be no doubt that the disease was syphilitic.

Reviews and Notices of Books.

The Life of John Heysham, M.D. Edited by Dr. HENRY LONSDALE. London: Longmans. 1870.

DR. LONSDALE has added another picture to his gallery of Cumberland worthies in this memoir of one who was a remarkable man in his time, and who, although his name has not been associated with any great discovery in the profession to which he belonged, yet earned for himself a reputation in other respects which has lasted to this day, and is not likely to fade.

The son of a ship-owner in Lancaster, John Heysham, after receiving a good classical and general education, was apprenticed for five years to Mr. Parkinson, a surgeon, at Burton, in Westmoreland. In this service he had to undergo the usual drudgery of a village medical apprentice under a master who rigidly exacted the performance of every duty, from the mixing of pills and potions even to the rubbing down of his horse. "The Doctor's lad," as an apprentice was called in those days, had a rough time of it. Dr. Lonsdale brings into contrast the apprentice "attending to the stable one hour and to aloes and rhubarb the next," and the modern young Esculapius "dashing along the road in smart clothes, with light cane and kid gloves, deeming himself a suitor for the comeliest of company, even of the lavender sort." No doubt the apprenticeship system was, as Dr. Lonsdale says, well calculated to sharpen a lad's wits, and to fit him to rough the world, when "a rougher world than country practice was nowhere to be found in his Majesty's dominions"; and this was evidently the effect it had on young Heysham. He manifested early indications of a taste for natural history, and during his pupilage he pursued the study of classics and mathematics, under the vicar of Burton. When his apprenticeship was over he set out for Edinburgh, whose medical school was then in high repute, the 170 miles' journey having necessarily to be made on horseback. At Edinburgh he studied physic under Monro, Cullen, Black, and other famous teachers, for three years, obtaining his doctor's degree in 1777, his inaugural thesis being "De Rabie Canina." On leaving Edinburgh he spent some time in Holland, with the view of enlarging his medical knowledge, and in 1778 he settled down in practice as a physician at Carlisle.

A mind so active as Heysham's was soon impelled him to strike out lines of observation and study in advance of the ordinary routine of a provincial city practice. The record of his first ten years' work is thus summed up by Dr. Lonsdale:—"He had made two surveys of the city and its suburbs and village parochial districts, and numbered the houses, the families, and the population therein. Along with the census he had collected the numbers of births and deaths, the ages and conditions of the people; and by classifying the causes of, and circumstances attendant on, the death-rate, had framed bills of mortality for each year. He had founded a public dispensary, and laid down good rules for its guidance and future success.....He had published a valuable essay on Gaol Fever (*typhus carcerum*)..... and had found leisure to study the natural history of Cumberland"—the results of which latter study are recorded in Hutchinson's "History of Cumberland." Heysham's object in publishing his treatise on gaol-fever was to call attention to the successful results of the stimulative method of treatment which he had boldly adopted in opposition to the "starving system" then, and for many years subsequently, in vogue. "Heysham," says Dr. Lonsdale, "relied on port wine and cinchona given in large quantities. If not the first to advocate stimulants, he prescribed larger doses than any physician who preceded him in the century. Sir John Pringle, the boldest advocate for wine, seldom gave a bottle in the day; but Heysham ordered from one to two bottles and a half of port in the same period of time, and always with advantage. The doses of bark prescribed by Heysham were also nearly double those which Pringle usually exhibited." There can be no doubt that, in the practice of his profession, Heysham was far in advance of his time: witness the bold step he took in his prompt adoption of Jenner's great discovery by having his own child vaccinated, and thus doing his utmost to commend the new practice to favourable reception in Carlisle, where it had not previously been tried.

As a medical man, he is said to have enjoyed a large share of public confidence; yet Dr. Lonsdale observes that "he never made more than £400 a year by practice among the best families."

The vignette portrait of Heysham in his sixty-sixth year brings before us a striking specimen of "the fine old English gentleman, one of the olden time," and we can well believe him to have been "one of the most handsome men of the border city." His was a strong physique, capable of any amount of exertion, and we read of him, after taking off his three, and on great occasions four, bottles of "strong port," going home "to give the last strong filip to his stomach by a hearty draught of hot rum punch." He died at the ripe age of eighty-one.

It is an indisputable fact that Heysham laid the foundation upon which the great superstructure of life insurance transactions in this and other countries rested, until within the present generation, almost exclusively. His published observations on the Bills of Mortality in Carlisle fell by accident into the hands of Mr. Milne, an eminent London actuary, who picked them up at a bookstall near Leicester-square. Mr. Milne at once recognised their value, for they were perfectly unique both in the extent and precision of their facts; and after a long and interesting correspondence with Heysham (printed in the Appendix to this work) he proceeded to construct the well-known Carlisle Life Tables, which became thenceforward almost universally the basis

of life insurance. Until the establishment of the Registrar-General's Department, thirty-three years ago, which has since provided Dr. Farr with an unrivalled series of observations, extending over seventeen years, and embracing the vital statistics of the whole English population, and has enabled him to construct the Government English Life Table, the Carlisle Table was, according to so eminent an authority as Professor De Morgan, "the best existing table of healthy life in England." And we cannot more fitly close this imperfect memoir of Heysham, the pioneer of English vital statistics, than by noting that our greatest living statist, Dr. William Farr, has, in the Registrar-General's Fifth Annual Report, put upon record his "humble tribute" to the framers of the Carlisle Table, Dr. Heysham and Mr. Milne, "which Table," he says, "was the first correct representation of the vitality of any portion of the English population."

The Pathology and Treatment of Venereal Diseases: including the Results of Recent Investigation upon the Subject. By FREEMAN J. BUMSTEAD, M.D., &c. Third Edition, revised and enlarged, with Illustrations. 1 vol. pp. 704. Philadelphia: Henry C. Lea. 1870.

THE origin of syphilis is unknown. No theory has been adequate to account for its appearance about the end of the fifteenth century; nor, indeed, has it been proved to the satisfaction of everybody that syphilis had not been in existence long before. The obscurity that attaches to the disease in this respect seems as if it were destined to extend to it in others also. The question of the duality or not of the venereal virus can scarcely yet be said to be definitely settled. Contemporaneously with the appearance of this new edition of Dr. Bumstead's work, we have Mr. John Morgan introducing the subject to the Surgical Society of Ireland for discussion. Mr. Morgan has shown, as the result of his observations and inoculations, that soft sores, followed by constitutional symptoms, are very common, and that the inoculation of the vaginal discharge from a female constitutionally infected, where no abrasion of the surface or intra-vaginal or uterine sore existed, is capable of producing in a syphilitic subject effects identical with those obtained by the inoculation of pus from a chancroid. We do not think that it would be difficult to show that these facts are not inconsistent with the views put forward by the dualists; but we allude to them in order to indicate the seemingly shifting basis of modern syphilitic doctrines. Virulent properties have been ascribed by more than one writer to the uterine and vaginal discharges of a female constitutionally syphilitic.

We have on several occasions called attention to Dr. Bumstead's work, of which this is the third edition, "revised and enlarged." It is the most complete book with which we are acquainted in the language. The latest views of the best authorities are put forward, and the information is well arranged—a great point for the student, and still more for the practitioner. The subjects of visceral syphilis, syphilitic affections of the eyes, and the treatment of syphilis by repeated inoculations, are very fully discussed. A patient, if shown the plate at p. 521 to illustrate the last, would not, we suspect, be prepossessed with this plan of treatment.

Lectures upon Diseases of the Rectum. Delivered at the Bellvue Hospital Medical College, Session 1869-70. By W. H. VAN BUREN, A.M., M.D., Professor of the Principles of Surgery, with Diseases of the Genito-Urinary Organs, &c., in the Bellvue Hospital Medical College; Consulting Surgeon of the New York Hospital, &c. New York: Appleton & Co. London: Trübner & Co. 1870.

IT might perhaps be as well for the reader to commence the perusal of this little volume at the last lecture instead of the first, for Professor Van Buren discusses therein the means of exploration of the rectum, which would seem to be the first thing required to be done. The lectures appear to us practical and good. The author has evidently had much experience of the diseases of which he is treating, and the consequence is that he gives us every now and then some useful hints. He is favourable to the operation of forcible dilatation of the sphincter ani muscle in the treatment of fissure or irritable ulcer. It was first proposed by Recamier, of Paris, once the rival of Dupuytren at the Hôtel Dieu. "The proceeding may," he says, "seem to be rough, and to lack the precision and accuracy of the knife; but it is thoroughly scientific, and its practical value is established. Forcible dilatation, when first applied to the cure of stricture of the urethra, was opposed as a rough and unsurgical proceeding; but it has proved in practice to be a most valuable resource, finding more favour with thoughtful surgeons than the knife in the management of a large class of cases; and I anticipate a similar verdict for the same principle employed elsewhere."

Medical Diagnosis, with special reference to Practical Medicine: a Guide to the Knowledge and Discrimination of Diseases. By J. M. DA COSTA, M.D., Lecturer on Clinical Medicine and Physician to the Pennsylvania Hospital, Fellow of the Royal College of Physicians of Philadelphia. Third Edition. Philadelphia: J. B. Lippincott and Co. London: Trübner and Co. 1870.

THIS book is very well known and deservedly popular. The present edition has been much improved, with a view to utility and facilitating the study of diagnosis. The author proceeds from a clinical basis instead of a pathological one. The plates are good; they are original and of a diagrammatic character, serving to illustrate and elucidate the descriptions in the text.

Foreign Gleanings.

THE ETIOLOGY AND TREATMENT OF DIPHTHERIA.

PROF. STEINER, of Prague, has published, in the *Jahr. f. Kinderk.* of November 1st, 1870, a series of cases in which he was able to try different kinds of treatment, and watch the result. He thinks that the etiological question is not as yet solved, although very great authorities consider diphtheria to depend on blood-poisoning. Nor can the purely local cause, in the shape of germs, be satisfactorily proved. Further investigations are indispensable to decide between the two theories. Therapeutically, the professor considers that the means which answered best in his hands are lime-water locally, and, internally, quinine, chlorate of potash, and wine; when laryngitis occurs, emetics; and if they act no more, tracheotomy. When paralysis follows the acute attack, tonics are to be recommended, but the author has found that in many cases the symptoms of paralysis disappeared without treatment.

Dr. Moritz Schlier has tried carbolic acid extensively in diphtheria, his reason for using it being the supposed existence of germs in this disease. The solution used was 1 in 16, and it was energetically applied to the false membranes by means of the finger wrapped in some linen. No internal remedy was employed; but those patients whose age allowed them to gargle were made to wash out the mouth with the above-named solution every half hour. Out of 36 cases, 13 recovered, and these were all very severe; most of the patients, also, were out of danger in about four or five days. During convalescence, tonics and wine were liberally used.

KOUSSIN IN TÆNIA SOLIUM.

Professor Ditterich, of Munich, states, in the *Allg. Med. Cent. Zeit.*, Dec. 28th, 1870, that he has been very successful with koussin, the alkaloid of kousso, discovered by Pavet. It is a pity that this alkaloid is so very expensive,

as no more than 3 per cent. can be obtained. The author has found it act in forty-grain doses, divided into two powders, to be taken in a wafer; and he thinks that none of the precautions customary with kousso are necessary. Koussin seems to have an aperient effect, and carries off the worm with the stools in three or four hours. Hence no castor oil is required. Professor Ditterich does not say a word about the head, but principally dwells upon the small dose necessary, and the absence of vomiting and nausea. The price of the dose is 6s., which certainly is not extravagant, when it is considered that, originally, the dose of kousso was advertised in Paris at 16s.

HYPODERMIC INJECTIONS OF MORPHIA.

Dr. Hamon, of La Rochelle, has tried to prevent the use of cloudy morphia solutions for his injections. Finding that, after a while, such solutions present threads and floating particles, he has had one grain of hydrochlorate of morphia put in a little compartment of the box containing the syringe. When wanted, he places twenty-five drops of water into a small glass, drops the powder into it, and puts the glass in warm water. The salt immediately dissolves, and five drops of the solution contain accurately a fifth of a grain of morphia. What become of the twenty drops left? Are not five drops too small a quantum of liquid for injection purposes?

GOITRE AND THE USE OF STEEL.

Dr. Seitz maiutains, in the *Allg. Med. Cent. Zeit.*, Dec. 28th, 1870, that steel medicines not only cause an increase of the Derbyshire neck, but produce an enlargement of the thyroid gland where there is the least actual or hereditary tendency to the complaint. The author quotes several striking cases, and suspects that such countries where the water contains a proportion of iron are most likely to be inhabited with people suffering from goitre. Iodine succeeded admirably in his hands, where, with steel, he had provoked the rapid enlargement of the gland. Dr. Seitz calls upon his brethren to undertake experiments, and to follow up the cases with actual measurement.

MEDICAL EXPERIENCES OF THE WAR.

ON Monday evening Dr. Thudichum continued the narrative, before the Medical Society of London, of his recent experiences at the seat of war, especially dwelling upon the character and effects of the different wounds inflicted by the chassepôt and the needle-gun. Many German soldiers were wounded at distances where they could scarcely distinguish the enemy. The wounds so caused were characterised by slight penetration of the tissues; sometimes the clothes were not rent by the ball, but carried forward into the fleshy parts a short way, and on pulling away the intruded portion of clothes, the ball came away also. Very ugly contusions were produced by spent balls striking hard bony parts, for instance the tibia, and frequently a portion of the struck bone subsequently necrosed. The range of the chassepôt had for the German this disadvantage, that the latter had to advance always under the fire of the French over a space of 1200 paces before they could or did fire. Few of the German bullets reached the French with the small velocity and low penetrating power of the chassepôt bullets at 1200 paces. The effect of the German bullets was, at their longest range, mostly more severe than those of the French; and at equal velocities the German bullets, being the larger, had the greater penetrating power, and splintered and wounded the more decidedly of the two kinds. In penetrating wounds of the abdomen and chest, the small French bullet seems to give to the wounded man a better chance of recovery. Wounds produced by guns fired point blank—i.e., made by balls at their highest velocity,—if no bones or large bloodvessels were injured, healed better than those inflicted by balls at lower velocities. The most common wounds, next to those made by balls, were such as followed the striking of the body with fragments of shells, and these were fearfully lacerated; the large pieces of shell tear, break, and kill; the smaller penetrate deeply. These fragments killed oftentimes without external laceration. The majority of cases in the hospital to which Dr. Thudichum was attached were injuries of bones in the secondary state, requiring operative interference. Many French were struck on the front and top of the head on account of their awaiting the attack of the Germans in rifle-pits; the mode of treating these cases was to remove loose fragments of bone by chiselling off projecting pieces and jammed edges, and thus allowing depressed pieces to rise. The operation of trephining was not adopted, and was considered injurious. The wounds themselves generally healed well. The complications of the various wounds were many and most varied. A French soldier was wounded at Gravelotte by a piece of bombshell, which entered the *right* mastoid process, leaving an external wound of about half an inch in length, running perpendicularly. He was thought to have received a second injury below the *left* eye, but the latter wound was found to be the exit of the piece of shell which entered at the right mastoid process. The right facial nerve was completely paralysed. The canals made by bullets were, in some cases, lined by loose spiculæ of bone. One ball had entered the right shoulder below the spine of the scapula, just missed the cavity of the chest, coursed round the first rib, destroyed the brachial plexus so as to completely paralyse the arm, and then had lodged beneath the integuments in front below the middle of the right clavicle. A French sergeant, who had been in Rome in 1848, the Crimea and Italy, was shot through the pelvis from one side above the trochanter to the other above the right groin. The wound healed in six weeks, and he did well. Resection of the shoulder-joint did well in one case. In the hands of the best surgeons, and under the most favourable conditions, excisions of the knee- and elbow-joints did badly. These cases cannot have the care bestowed upon them in the field which they require in order to bring them to a successful issue; and Dr. Thudichum adheres to the old dictum "that gunshot wounds of the knee-joint require amputation." Carbolised lint was used with great advantage. No sponges were allowed for cleansing wounds, carded oakum being employed for the purpose, and after use being at once burned. Oakum itself does not seem to have been suitable for wounds, being too coarse. Phenylized lint is preferred by Dr. Thudichum. Bone operations did well, because sharp chisels were used, rigorous cleanliness of hands, instruments, and bandages was observed, and the patients had plenty of fresh air, and the tents were kept clean. Dr. Thudichum condemns the use of saws, and thinks that bones are "the most manageable part of the body." Wounds from the mitrailleuse were not seen by the author; and he adds that the Germans did not dread this weapon, since its missiles keep close together, and do not spread so as to wound many at a time. Wounds from shrapnell, and from sabre or from bayonet, were infrequent in Dr. Thudichum's hospital; and he says, "at close quarters that side generally decamped which had the least liking for cold steel." Typhoid and dysentery, of course, were seen in fair abundance. The patients were many of them poor, and came from distant parts of Germany. Dr. Thudichum prefers male nurses for military hospitals. *Religieuses* in one sense make good nurses, because taught to obey; but otherwise offer no advantage over hired nurses, except that they mostly work for keep only, and not for wages as well as board. Dr. Thudichum concluded by paying a tribute to the medical staff of the hospital to which he was attached, and his belief that they had done well what they had done, and in such a way as to uphold the standard of English surgery.

BEQUESTS, DONATIONS, &c. — The Worcester Infirmary has received £748 13s. 8d., under the will of Miss Brampton. Mr. John Greene, of Gateshead, bequeathed £500 to the Gateshead Dispensary; £200 to the Newcastle-on-Tyne Infirmary; £200 to the Hospital for Sick Children, Newcastle; and £200 to the Prudhoe Convalescent Home, Whitley. Mr. James Meakin, of Hanley, has given £250 to the North Staffordshire Infirmary. The Hospital for Incurables, Dublin, has received £200 under the will of Miss Laird, of Sandymount. Mr. F. A. Schrooter has given £100 to the North London Consumption Hospital, and £100 to the Hospital for Diseases of the Throat, Golden-square, "in memory of his son." "E. N." has given a second £1000 to St. Mark's Hospital for Fistula.

THE LANCET.

LONDON: SATURDAY, JANUARY 7, 1871.

IT is highly gratifying to us to note two facts concerning our Medical Bill: first, that up to this time no critic has disapproved of its proposals; and, secondly, that the numerous critics who have considered it have agreed in a decided approval of it. The objections made have reference only to secondary points in the Bill, and they are made with reasonableness and moderation. Only one medical member of Parliament—Dr. LUSH—has yet spoken publicly of our Bill, and it was to express general approval of its provisions. The Central Somerset Medical Society, the Ayrshire Medical Association, and the Committee of the Manchester Medico-Ethical Association have each discussed the measure, and signified their approval of our main propositions. The Committee of the Manchester Association and the Ayrshire Medical Association, while expressing their opinion that the Bill is worthy of the support of the profession, make suggestions for certain alterations of clauses which shall have our best attention. Among the resolutions of the Manchester Association is one to this effect: that this Committee is of opinion that the Medical Council should be composed of representatives of the State and of the profession only. We refer to this suggestion the rather for two reasons: first, that we made a similar proposal in the course of last year, and seriously contemplated a repetition of it when we came to draft our Bill; and, secondly, because we know it to be the opinion of some of the men who have the elevation of the profession most at heart. Notwithstanding, we thought it better, on the whole, to give a representation, to the extent of one-third in the Council, to the corporations and other medical authorities; for it must not be forgotten that, in choosing representatives, the corporations and the universities will have to act together. This arrangement preserves to the Medical Council all that is valuable in the experience of the corporations, while it does not admit the doctrine that the Medical Act is to be worked so as to consider first the pecuniary interests of the nineteen individual bodies. The change from a body made up of the corporations to one in which they had no *locus standi*, would, to say the least, have been too violent for Parliament; especially considering that we propose to make other examining arrangements which may affect the pecuniary interests of the different bodies. We commend these considerations to the Manchester Association; at the same time we ask the corporations to see the tendency of public opinion, and to admit that our Bill does not disregard them or their interests. The other suggestions both of the Scotch and the Manchester Society relative to the prosecution of offenders against the Act and a modification of Clause 29, are very reasonable, and shall have our attention.

One word to all the medical societies of the country. It is now January. Next month Parliament will meet. And it will greatly increase the chances of a settlement of this question if a discussion on our Bill is taken immediately, and if members of Parliament are personally seen and requested to support it. We shall gladly insert short reports of local meetings.

A GREAT part of the duty and satisfaction of medical practitioners just now has relation to the catarrhal class of diseases. It has made a great impression on the character and amount of weekly mortality, and it constitutes a great part of the practitioner's work. Of late years we have somewhat made light of this department of pathology. Our minds have been so occupied with the zymotic class of diseases, and the diseases connected with foulness or impurity of the atmosphere, that we have been diverted from the study of the diseases produced by cold and wet. As long as we have got air, we have been apt to be careless of the danger of getting too much of it, or of the temperature of it, or the degree of its humidity. And yet, if any general practitioner looks over his list, he will find it to consist very largely of diseases produced by cold, or cold associated with dampness of the atmosphere. We have said that the satisfaction of a practitioner has relation to this class of disease, by which we mean that his comfort will be promoted in proportion to the success with which he relieves it. It is a strange duty that we have to discharge. Catarrh, in one form or another, in such weather as we have had in the last few weeks, is almost the complement, so to speak, of our climate. It is almost inevitable. And we are called upon to remove it. Medicine has to undo the effects of climate; and it has to do so while climatic conditions are all the while more or less in operation. We purpose saying a few words on this important class of diseases. And, by way of order, we shall arrange what we have to say under two heads. We shall consider first the chronic and secondly the acute forms of catarrhal disease, including pneumonia in the group.

The chronic or subacute cases are by far the most numerous, and the treatment of them gives trouble chiefly from the circumstance mentioned, that our remedies are daily resisted by the condition of the atmosphere. In not a few of the cases the catarrh has its principal seat in the nares, anterior and posterior, and in the ethmoid cells. The constitutional depression incident to this catarrh is less than in most other forms of the disease, but it is still considerable; the discharge soon becomes purulent, and may be somewhat large in quantity. The system under this catarrh is sensibly below par. Light attacks of this kind, constituting a common cold, are, of course, not often objects of medical treatment. But when the attack lingers, when it becomes chronic, it is a considerable ailment, for the relief of which the patient will be very grateful. The persistence of such purulent nasal catarrhs is sometimes significant of a strumous element in the constitution. There are two or three remedies of great use in such states—conspicuously citrate of ammonia in the early stage, and ammonia with bark or quinine and cod-liver oil, to be given separately or in association, in the later stages. Two grains of quinine in a pill twice or thrice a day will often control a tendency to coryza, or nasal catarrh. It is very doubtful whether

confinement in the house is beneficial in such cases. Provided that draughts of cold air on parts of the body and wet clothes and wet feet are avoided, free exposure to the open air is beneficial, when it is not very cold or foggy.

Of late, catarrh in many cases has been bronchial in its site; and in a very large proportion only the larger tubes have been affected. The affection has been subacute, with a good deal of cough, some elevation of the temperature, and a whitish tongue; there has been either slight sibilus or mucous râle; or more generally along with these symptoms there has been more or less nasal catarrh, with sneezing. It is noticeable that many entire families are affected in this way; that the general vitality, of children especially, is lowered by the attack. The appetite is lost or impaired, the little patients lose colour, and look miserable. In some of the cases, after a few days, a neuralgic tendency is developed, affecting either the ear or the nerves of the teeth. It is the multiplication of cases of this kind that makes medical practice just now laborious and rather depressing. If one meets with a case of acute pneumonia or of uterine hæmorrhage, there is a definiteness about it, and a chance of its being very soon better or worse; but this kind of state, trailing on, as it has a tendency to do, for days or weeks, is often at once irritating and discouraging to the practitioner. There are no specifics for it that we know; but there are remedies the use of which greatly favours the relief of the symptoms and return of health. The cough is a harassing symptom, especially at night, and should be relieved by special means, of which few are more useful for adults than the compound ipecacuan and squill pill of the British Pharmacopœia, taken at bedtime. The relief of the congested state of the mucous membrane, if very dry and accompanied with much heat of skin, will be promoted at first most effectually by a mild saline, such as citrate of potash, accompanied with a little ipecacuan wine. But very soon, often as soon as the practitioner is called in, which generally is not till the case or cases have lasted for several days, the addition of ammonia is indicated by obvious depression of the vital powers, and by the tendency to nocturnal or paroxysmal coughing, or coughing in paroxysms, worst at night. In children ammonia is very beneficial. It should be postponed if there is much elevation of temperature. Throughout, in such cases, it seems better to keep the patient in-doors and in a room comfortably warmed. In the way of external application, at first, and while there is any acuteness in the symptoms, or a feeling of soreness and rawness in the chest, nothing is more beneficial than a linseed poultice or a succession of them. But if there is a tendency to chronicity, stimulating applications to the chest are needed, such as the compound camphor liniment, or, in the case of children, equal parts of this and soap liniment. When the cough has ceased and all subacute symptoms, especially if there be any neurotic or neuralgic element in the case, quinine will be beneficial; but it requires to be given carefully, and at first in small doses. Throughout, nourishing food, in the form of broths or warm milk, where there is no appetite for solid food, is indicated.

We have not referred above particularly to the cases of chronic bronchitis which are so numerous in every winter, and which seem to constitute almost the normal form of senile decay in our climate. The relations of this disease have received some fresh elucidation of late years at the hands of Dr. HEADLAM GREENHOW. He has especially brought forward much clinical evidence to show that people of rheumatic or gouty constitutions are more liable to attacks of bronchitis than others. This is a point that often guides us valuably in treatment. The most important point to remember in the treatment of this disease is the essential tendency to continue and to recur; in other words, to chronicity. In view of this, all depressing treatment is out of place. Great good is done in the treatment of nocturnal cough by such a pill as above mentioned. There are two medicines, in addition to the common expectorants, which in this disease should have the special attention of practitioners—viz., ammonia and dilute nitric acid, according to the varying circumstances of the case. If with a paroxysmal cough, the breathing dry and sibilant, the circulation is languid, the pulse feeble or intermitting, and the weather very cold, a draught of ammonia (in five-grain doses) and senega is likely to be very beneficial, with or without ipecacuanha. If, on the other hand, the ammonia fail to relieve, or the secretion of mucus and pus be excessive, and the weather be not cold and relaxing, dilute nitric acid, in ten-minim doses, with twenty-minim doses of spirits of nitre, in peppermint water, every six hours, will often do the most marked good. Cod-liver oil will frequently afford great help to patients with chronic bronchitis. They say "it does them good." This is especially true in dispensary practice, where, doubtless, it takes the place of food, which is a very essential element of treatment. We shall reserve for another article the more acute diseases caused by cold.

IT is reported that the Government has it in contemplation for the future that the medical candidates for the Naval Medical Service shall be subjected to a course of training similar to that now pursued by young medical officers of the British and Indian armies. What may be the exact basis of fact on which this rumour rests we cannot say, but the object to be attained seems to us so desirable that we may believe it probable. Our readers will remember that we long ago suggested the formation of a United Service Medical School. The various officers of the different services might receive at such an institution a special and technical training before entering upon duties and practising their professions under conditions which must be new to most of them, and in climates the diseases of which they have had little or no opportunity of seeing. It has been urged by some that the wards of the infirmary of Greenwich Hospital, now tenanted by the *Dreadnought* authorities, would afford an excellent field for the instruction of naval medical officers; and no doubt there is much to be said in favour of such a scheme. To begin with, there is the occupancy of Greenwich Hospital, which would afford abundance of room; for it is anything but creditable to Admiralty administration that the finest building in England should remain permanently entrusted, as it has been for the last four or five years, to the care of a clerk of the works and two or three policemen. Again, the Seamen's Hospital Society receives patients of all nations, drawn ex-

clusively from the sailor class, who come from every quarter of the globe; and it is contended that the naval medical recruit would have an opportunity of not only gleaning special medical experiences, but of familiarising himself with the manners and customs of seafaring men, many of which are more peculiar than pleasant. On the other hand, we cannot shut our eyes to the difficulties that stand in the way of establishing a Naval Medical School at Greenwich. The Government would urge with considerable force that it could not incur the great expense of a new and separate establishment whilst there was already in existence the large institution at Netley, possessing an able and experienced professorial staff, and a school specially and expensively furnished with every appliance necessary for the practical instruction of medical candidates in Practical Chemistry, Hygiene, and Morbid Anatomy. Altogether apart from the clinique, we regard the course at Netley as a very important one, and such as can be obtained nowhere else. The naval, like the military, surgeon will find himself constantly confronted with sanitary questions about which he will be expected to give an opinion, and Professor PARKES's course of Hygiene would furnish him with the requisite information for forming a correct one. What the army and Indian medical officers learn will be equally useful to naval men, for whom additional instruction adapted to their requirements could easily be provided. As regards the clinical study of disease among seamen, the *Dreadnought* offers, no doubt, great advantages; but it must be remembered that our troops are stationed all over the world. Large numbers of invalid soldiers are constantly being transferred from foreign stations to the Netley Hospital for further treatment or discharge from the service; indeed, now that we have such a large European force stationed in India, with a regular overland route system established by Government, there is ample scope for observing the effects of tropical diseases. It would, moreover, appear desirable that medical officers of the public services should be instructed together, with a view of securing a certain uniformity of action and information on several matters connected with those services; and as their duties and travellings, no less than a community of interests, will frequently bring them together, it would perhaps be as well that their mutual acquaintance commenced at the same place.

WE rejoice to observe that the Committee appointed to report on the question of Out-patient Administrative Reform is again at work. The Report of the Sub-committee on Dispensaries, presented at their last meeting, contains an admirable digest of that form of medical charity which professes to provide for the poor who, although above the rank of pauper or even hospital patient, are yet unable to pay the fees of an ordinary medical attendant. No form of medical relief is so much abused, to the very serious loss of the general practitioner and the permanent demoralisation of the class relieved. Hundreds of persons subscribe to dispensaries in order that they may provide their dependants with advice and medicine at a cheap rate; and such are the facilities for obtaining admission, that few working men ever think it necessary to engage a medical attendant or to make provision for his payment.

Of the forty-eight dispensaries from which reports have been received, the Committee find that twenty-two are free, the patients paying nothing whatever either for medicine or appliances. At three there is a box for contributions. At two the patients are expected to pay half the cost of surgical appliances. In only three is there any official inquiry made as to the fitness of the patients for gratuitous assistance. In considerable number the medical officers are expected to select the cases; and in many the subscribers recommend absolutely without check. In three institutions the consciences of the working men are appeased by their being permitted to contribute one penny at each visit, or for each bottle of medicine. This arrangement appears to us to be far worse than a downright gift. It deludes the working man into a sense of security. He knows that he can get what he wants at any time by a payment which involves no sacrifice on his part, but which simply enables him to cheat the medical attendant of a fee. What wonder is it that we should find medical men being ruined by having to compete with such institutions. We saw only the other day a ticket exposed in a window in a considerable thoroughfare offering medicine and advice for sixpence; and such is the attraction of the very name "dispensary," that we find upon our table an advertising "dispensary" offering the assistance of its qualified proprietor at a still lower rate. The whole thing is degrading to our art. Let us either give generously or not at all; and when we consent to take fees proportioned to the means of the classes who require our help rather than to the intrinsic value of our services, let us endeavour to secure a proper appreciation of our actions by making our concessions in deference to the spirit of forethought and self-respect which we desire to cultivate amongst the industrious and deserving poor. It is on this ground that we have contended that the absolutely poor ought to be provided for at the Poor-law dispensaries; and we would define this class as consisting of all who are unable to contribute to a provident dispensary the very moderate sum of one penny per head per week, or threepence per week for an entire family. It should be observed that the advice and medicine provided at the new Poor-law dispensaries will be vastly superior to those which the poor were formerly in the habit of receiving from the parish doctor, who, besides working hard for an extremely low salary, had to find the drugs. And when these institutions shall have become general, all excuses for giving gratuitous advice will cease, though it may still be desirable to give gratuitous consultations should the medical officers of the Poor Law seek them. We hope, therefore, that the profession will adopt the proposal to convert the existing general dispensaries into provident dispensaries; leaving, however, power to the subscribers to recommend poor persons for immediate treatment who are actually ill, on the understanding that they shall become subscribing members on recovering their health.

We cannot close these remarks on dispensaries and gratuitous advice without a strong word of condemnation for those so-called hospitals, many of them without a bed at their disposal, by connexion with which a certain class of practitioners seek to attain to professional reputation and success.

Such institutions profess to give gratuitous advice, but no sooner does the patient find himself within their doors than he discovers that his circumstances are minutely investigated and his means gauged, with the view to obtaining contributions in support of the institution. He must, in fact, contribute or depart; but his choice is soon made, for he finds that the payment is fixed upon such a charitable scale as to afford him sufficient inducement for preferring the special novel treatment of which these institutions generally boast to the more expensive and possibly more unpretending treatment which his private attendant is likely to afford him.

It is indeed high time that the profession spoke out upon this important subject. We cannot afford to be selfish in our charities. The impress of professional denunciation must be put upon such institutions, and the only way is to declare, once for all, that hospitals and dispensaries must be either free or provident: free when it is necessary to collect together a large number of patients for teaching purposes; but provident when payments represent a principle, that everyone should look forward to the possibility of requiring medical advice, for which it is his duty to pay according to his means.

UNION IS STRENGTH; and we are glad to learn that active steps are being taken at the present time to bring about an amalgamation of certain of the Medical Schools of London. It may be remembered that, a year or so since, certain communications passed between members of the respective staffs of the University College and the Middlesex Hospital schools with a view to their union; but these negotiations failed, we believe, through a difficulty in arranging financial details. The project has been resuscitated, with the additional suggestion that the St. Mary's school should unite with the other two. The matter has acquired further importance on account of certain examining bodies requiring that every candidate shall produce certificates of having occupied dresserships and other posts, in which a practical acquaintance with disease may be more certainly gained; and their having resolved to make examinations in general more practical (to wit, at the College of Surgeons). The consequence is that a wider field of hospital practice is required in certain schools to supply the demand for the necessary appointments. At a meeting of the Medical Committee of University College Hospital held last Tuesday, after some discussion, a subcommittee was appointed to draw up a definite scheme, to be submitted to the staff at an early date for their approval in the first instance. The main points upon which a general agreement exists are—the association of University College, Middlesex, and St. Mary's as clinical schools; the concentration of all systematic teaching and lectures at University College; and the payment by the medical student of one standard fee, to cover his attendance on lectures at University College itself, and the clinical practice of the whole of the three hospitals. Should certain of the existing lecturers feel disinclined at once to give up their lecturing, it is believed that provision might be made for the continuance of their lectures for the present. The scheme would further involve the association of certain of the junior officers of the three hospitals with University College in tutorial and similar posts. As to the matter of fees—for, after all, amalgamation resolves itself into a question of money,—it is thought that these might be divided so as to provide, on the one hand, a sufficient sum for the systematic teaching, and, on the other, for division amongst the staffs of the three hospitals concerned, in such a way as to secure them from any loss in the acceptance of amalgamation. It has been thought that an obstacle to the proposed union might be raised by the governors of one or more of the three hospitals; but it seems that the powers reserved to the respective staffs of the several schools are sufficient to secure amalgamation, if that be thought desirable. It may be regarded as very probable that the facilities for giving dresserships possessed by University College will be increased by the aid of the practice of the Royal Free Hospital, whether union with Middlesex and St. Mary's be carried out or not. But we hope that nothing will interfere with the union projected between University College, Middlesex, and St. Mary's schools. With the advantages of instruction by the present professorial staff of University College, somewhat enlarged perhaps, and the opportunity of attendance upon the practice of three hospitals under their combined staffs, the student would enjoy unusual facilities for acquiring a practical knowledge of disease, whilst a healthy rivalry would be excited among the clinical teachers. Of the schools united under such a scheme we may truly say, in the words of HORACE,—

"Alterius sic
Altera poscit opem res, et conjurat amicè."

Medical Annotations.

"Ne quid nimis."

CHRISTMAS AT OUR CHARITABLE INSTITUTIONS.

THE enhanced severity of last Christmas has been appropriately met by an increased liberality in providing Christmas cheer for the poor inmates of our charitable institutions, particularly our county lunatic asylums and workhouses. The most gratifying reports of the manner in which the great Christian festival was observed throughout the country have reached us. Even in Scotland the sternness of the national creed was so far relaxed as to infuse some geniality into the cold routine of poor-house and asylum on the day which Lutheran and Catholic countries universally distinguish by a special forthputting of the benevolent and hospitable spirit. Apart from the duty of holding the most characteristic feast in the Christian year, its celebration has a value of its own in institutions where the blank uniformity of each successive day seems to deaden the moral nature of the inmates, and the rigid enforcement of stringent regulations "freezes the genial current of the soul." It were invidious to particularise instances in which local munificence led to a heartier observance of the duties of the day than in other quarters; but we cannot refrain from mentioning our sick children's hospitals and our asylums for imbecile children among the institutions where the blessing that awaits "him that gives" seems to have had its most gratifying reward. At the same time, the public are too prone to think sufficient for the day is

the dinner thereof; and that by laying in a stock of good deeds, like so many dozen of wine, on the 25th of December, they meet the claims of philanthropy, and absolve themselves from further charity for the next twelvemonth. This, of course, is not the view to take of one's duty to the sick and poor; nay, we think that a more equable distribution of the generosity that is crowded into Christmas Day would benefit the recipients more than the annual surfeit which they too often associate with the festival. There is no department in which improvement is more wanted than in the administration of charity, and particularly in that which exhausts itself on Christmas Day.

CONTAGIOUS DISEASES (ANIMALS) ACT.

DURING the year which has just closed upon us legislation has been frequent, though, save to foreign importers, it has not appeared to have been uncalled for or unnecessarily arbitrary. It is to the promptitude of action of Mr. Forster that we may fairly attribute our clean bill of health in this country in regard to cattle plague. With that disease raging on the Continent ever since the early autumn, and penetrating northward to the Baltic and westward to Belgian Luxemburg, nothing but stringent measures could have kept the dreaded pest from our shores.

As regards other cattle diseases, we have had a fair share of them, and foot-and-mouth disease especially has caused a great cry to be heard among our bucolic brethren; but this epizootic received an exaggerated importance from having been placed in the list of diseases to be legislated for by Act of Parliament, and we are inclined to consider its introduction into the Contagious Diseases (Animals) Act as simply a blunder, on the same principle that in human life we should object to the same severe regulations being applied to measles as to small-pox. One of our chief protections against serious animal diseases is "the thin silver thread" so pathetically described by our robust and masculine-minded Premier; and the same privileges which we are taught by him to consider as our protection against foreign invasion should enable us to evade the risk of sheep-pox and rinderpest.

Legislation during the last year has been active also in the interests of animals during their transit by railway. Their safety and their comfort have been alike thought out and provided for; and, whilst *human* life and *human* accommodation have not been deemed worthy of consideration, the bovine and ovine interests have been intensely studied. From the Privy Council to the Home Cattle Defence Association, from Miss Burdett Coutts to the drover to whom was presented the prize of a pair of moleskin breeches for tenderness to the "animal world," all classes have vied in showing a consideration for the brute creation which makes us almost fear that the Government (as well as the public) are inclined "to give up to *beasts* what was meant for *mankind*."

THE PATHOLOGICAL SOCIETY.

THE annual meeting for the election of officers and other business was held on Tuesday last. The report of the Council showed that the Society numbers in all at the present time 474, and the funds continue in a flourishing state, the Treasurer having again been directed to invest money to the extent of £100, which remains in his hand after defraying all expenses up to the present time. The committee appointed to make a report upon the subject of lardaceous disease has nearly concluded its labours, and is expected shortly to present a valuable communication upon this question. Dr. Quain resigned at the close of the evening the presidential chair, after acknowledging a most cordial vote of thanks accorded to him on the motion of Dr. Greenhow, who spoke of the long connexion of Dr. Quain with the Society, since its foundation in fact, and the services he has rendered in various official capacities, and whose observations were warmly received. Dr. Quain, in acknowledging the vote of thanks, referred the success of the Society in great measure to the harmonious working together of the various officials. Speaking of the large mass of reliable pathological data accumulated by the labours of different workers, and stored in abundance in the series of valuable Transactions issued by the Society, he expressed his belief that we were now in a position to commence, with every prospect of success, the important inquiry into the reason of pathological changes in living tissues as the result of morbid influences, and that not many years hence pathology would advance to a position in which it would afford the most reliable and definite aid to therapeutic measures. In this direction the Society might look with confidence to reap still further honour and reward.

MINERVA MEDICA NUPTA.

NEXT to the approaching nuptials of the Princess Louise with the Marquess of Lorne, the announcement that Miss Garrett is about to assume the bonds of matrimony is the great theme of conversation in social circles. Miss Garrett, as all the world knows, has fought her way up to graduation in medicine through discouragements and obstacles which would have daunted many a strong man; and her example is being followed by an adventurous band of seven ladies at Edinburgh, who have been wittily called the "Septem contra Edinam." But the step she is about to take puts the question of the medical education of her sex in a new aspect. Granted that women are capable of practising the profession as spinsters, can they continue to do so in the married state? It is this problem which Miss Garrett has now set herself to solve; for although, in terms of the Education Act, she forfeits by marriage her position on the School Board, she does not necessarily preclude herself from continuing to practise medicine. If she succeeds in combining the two functions of mistress of a household and medical practitioner, she will have performed a feat unprecedented in professional history, and added another notable incident to this *annus mirabilis*.

ST. THOMAS'S HOSPITAL.

MR. SOLLY, who has been connected with this hospital for about half a century, having been apprenticed to Mr. B. Travers in 1822, has resigned the post of senior Surgeon; and we imagine that, in recognition of his past services, he will be appointed Consulting Surgeon to the hospital as a well-merited honour. Mr. Solly was originally prosector, then demonstrator and lecturer on anatomy before he was old enough to obtain his diploma in 1828; was made assistant-surgeon in 1841, and full surgeon in 1853, and was re-elected in 1865 to complete his twenty years' service up to 1873. He lectured successively on anatomy, physiology, and comparative anatomy and surgery. The present step on Mr. Solly's part has been precipitated by ill-health; but we are glad to learn that there is a fair prospect that, after a month or two of further rest, he will again return to a certain amount of active professional work.

The vacancy created in the surgeoncy of St. Thomas's will be filled, in the ordinary course of events, by Mr. Sydney Jones, whose elevation will render vacant an assistant-surgeoncy. Several candidates for the latter appointment are already named—amongst others, Mr. McCormac, of Sedan

celebrity; Mr. W. W. Wagstaffe, formerly a distinguished student of the school, who has held the offices of demonstrator of anatomy for some half-dozen, and surgical registrar for three, years, and has done very good pathological and surgical work; and Mr. James F. West, also an old St. Thomas's man, who has been one of the surgeons of the Queen's Hospital, Birmingham, for the last thirteen years, is professor of anatomy at the same place, and is known as the author of several excellent surgical monographs. There is apparently, however, some uncertainty about the filling up of vacancies and the creation of new posts at St. Thomas's, and this will not be removed till the new buildings shall have been occupied.

THE ARMY AND NAVY MEDICAL SERVICES.

THE next competitive examination for the Army and Navy Medical Services will be held about the 20th of February next. The examinations for the Army have been discontinued since 1868 owing to the fact that the numerical strength of the department was, at that period, considered adequate to meet the requirements of the service for some time to come. As no appointments have been made since 1868, the present may be considered a favourable time for admission into the service, as those entering in 1871 will, as regards promotion, occupy a position immediately beneath those who entered in 1868. Notwithstanding the extreme slowness of promotion in the junior ranks, the Army Medical Service monopolises the largest share of candidates; the sister service of the Navy failing to attract a sufficient number to meet the requirements of the Admiralty. Owing, possibly, to the circulation of reports about the large number of applicants at Whitehall-yard, it is believed that a good many intending candidates have withdrawn rather than encounter a risk of failure at the next competitive examination. If so, it is very questionable, from what we hear, whether they have acted wisely, for it is doubtful whether the competition will, after all, be anything more than ordinary. The competitive examinations for the Indian Medical Service have been temporarily discontinued, and the Indian authorities have not, as yet, intimated the date at which they will be resumed.

THE CHARITY OF THE CLUBS.

AMONG the components of the long lists of donors to charitable objects that appear from time to time in different portions of the public press, and embracing individuals and collective bodies, is one class of representative bodies, comprising the most wealthy men of the land, very conspicuous by its absence; we mean the Clubs, especially those of the West-end. We look in vain for the aid which they give to our deserving charities, and the fact comes out into greater prominence at this particular season of the year, when the well-known benevolence of the great city companies so distinctly manifests itself, and money gifts to the poor are so freely distributed.

Formed in great measure to promote the personal comfort and gratification of the individual, the clubs are free enough to lavish extravagant sums of money upon anything that will secure to their members the good things of this life in greater readiness or abundance, and to embellish in every way the conventional elysiums in which the members take their fill of enjoyment and luxurious ease; but this seems only the more effectually to shut out from remembrance the wants and miseries of their poorer neighbours.

It is true that members of clubs in their individual capacity are frequently large and open-handed dispensers of public charity; but it must be remembered that these clubs occupy positions and sites which would otherwise be filled by wealthy residents, and on that account incur social responsibilities towards the poor and the needy, especially of the localities in which they are situated. It is no uncommon thing for very large sums to be rapidly subscribed for political purposes in the West-end clubs, which clearly shows that there is no want of means, but of the will and the heart, to bestow upon objects of charity. We should be sorry to think that the charity of the turf is only equalled by that of the clubs, and cannot believe that, if the matter were fairly considered, any of the members of these institutions, representing so much wealth, would begrudge the donation of a few pounds a year towards the relief of distress in this great city.

We believe that in most if not all clubs refuse or waste of all kinds is sold, and the proceeds added to the general fund; in other words, in the case of the clubs the poor are denied even the crumbs which fall from the rich man's table.

THE PHENOMENA OF DEATH BY DROWNING AND COLD.

THE Phenomena of Death by Drowning and Cold formed the subject of Dr. Richardson's experimental and practical lecture on Tuesday. He showed, amongst other experiments, that fish which would be presumed to be dead from what he called "glacial death" were easily recoverable. His view as to the suddenness of the collapse of the body in water at freezing-point is, that the exhaustion follows on peripheral nervous shock, due to the cold, and quick succeeding exhaustion of the nervous centres. Thus the temperature of the brain was reduced to 56° F., in an animal drowned in freezing water, while the temperature of the chest and abdomen was at 79° F. Death from drowning under ice is, Dr. Richardson states, one of the most rapid of deaths, and is completed, he believes, with so quick an extinction of consciousness as to be actually painless. The heart retains its power of action, the blood remains fluid, and the muscles keep up their irritability for a long time after apparent dissolution; and so favourable are all the conditions for renewal of living action, even for two hours, that a considerable advance in the practice of resuscitation must follow upon further careful and laborious experimental research.

DR. EDE AND THE ISLINGTON GUARDIANS.

THE Islington Guardians have three times had under their consideration the question how best to supply their new workhouse with medical officers. First they resolved to retain the services of Dr. Ede, and to appoint a resident assistant medical officer. Then they rescinded this resolution and resolved to appoint a resident officer at £100 a year, with rations and residence. Lastly, after a prolonged discussion on a motion to adhere to the first course of retaining Dr. Ede and having an assistant medical officer, they came to a division with six on each side. The chairman, Mr. Harvey, himself a medical man, gave the casting vote, as he had given his private vote, against Dr. Ede. The workhouse has to accommodate 1000 paupers. Dr. Ede has been officer for twenty-three years, and there has never been a complaint against him. Considering this close division, it is the intention of Mr. Wiltshire to revive the subject, when we hope he will be enabled triumphantly to carry the election of Dr. Ede. If an officer whose unimpeached and able service has extended over twenty-three years is not to be considered by a board of guardians, they cannot expect good men or good services. Dr. Ede should not only be reappointed, but reappointed on such terms as to secure the pension designed by Parliament, precisely for such officers as he. But we have another argument still

stronger for Dr. Ede's reappointment—viz., the interest of the poor inmates. They must regard their adviser of twenty years' standing with some human preferences, and we ask the guardians to consider their own preferences for a trusted medical man, who has come to a special knowledge of their aches and pains. Moreover, in the interest of the ratepayers, the loss of Dr. Ede's services would be a misfortune. Were it only to give a proper introduction to a successor, his reappointment would be a right course. But it is clearly not for the interest of the ratepayers that the responsible medical duties of their new workhouse should be all done by one man, at the salary of a junior clerk. We are sorry that a medical chairman should have voted as Mr. Harvey has done, but we hope that when Mr. Wiltshire again brings forward this matter, Mr. Harvey will either vote differently or be out-voted. Dr. Ede is far too valuable a servant to be lost.

HIPPOCRATES ON LADY MEDICAL STUDENTS.

THE advocates for the admission of ladies into the medical profession have tried to strengthen their cause by historical precedents, and, among other illustrations, they refer triumphantly to that of the lady professor of Bologna, whose portrait, by Giorgione, in the attitude of a lecturer and with her hand on a skull, may be seen among the works of the old masters now on view at Burlington House; while they don't forget to cite the fact of Mary Queen of Scots delivering a Latin oration of her own composition before a splendid audience of the French court, in favour of her sex being trained and legally qualified for the practice of the liberal professions. But they have strangely overlooked a passage in the celebrated Oath of Hippocrates, wherein the Father of Medicine, as if in anticipation of the movement now agitating Edinburgh, has expressly excluded women from the medical ranks. The passage is as follows:—After making the medical novice swear that he will reverence his teacher like his own parents, and share with him all his worldly means, he exacts the further vow from him: *καὶ γένος τὸ ἐξ αὐτοῦ ἀδελφεοῖσιν ἶσον ἐπικρινέειν ἄρρεσι καὶ διδάξειν τὴν τέχνην ταύτην, ἢν χρηίζωσι μανθάνειν, ἄνευ μισθοῦ καὶ ξυγγραφῆς*, "and that I will esteem his progeny like my own male brethren, and teach them this art, if they want to learn it, without fee or contract." Hippocrates carefully, and by an express adjective (*ἄρρεσι*), limits the promised instruction in medicine to the male issue of the teacher, thereby excluding the female, whom he would have mentioned by the epithet *θηλείαισιν*, if he had intended them to share the said instruction at all. There are other parts of the Oath which, by implication, if not expressly, discountenance women as practitioners of the medical art; but the above quotation will suffice to prove that, whatever authority the ladies may produce for their studying medicine, they cannot cite the Father of the Science himself.

THE PRIVY COUNCIL AND POISON REGULATIONS.

AN important communication has been received by the Council of the Pharmaceutical Society from the Privy Council relative to the keeping and storage of poisons, which we would fain hope will show to pharmaceutists the necessity of their seriously considering in what way "poisons" can be kept in their dispensaries so as to afford greater security than at present exists against accident, and the expediency of adopting measures to this effect. Mr. Simon is directed by My Lords of the Privy Council to request that the attention of the Executive of the Pharmaceutical Society may be called to the power which, by the Pharmacy Act of 1868, is given to the Society, with the consent of the Privy Council, to make "regulations as to the keeping, dispensing, and selling of poisons." He further states that My Lords believe it to have been the opinion of Parliament that proper regulations in this matter are required for the protection of the public; and as more than two years have elapsed since the passing of the Act without the Society having proposed any such regulations—to the Privy Council, of course, this means,—My Lords think it right to inquire whether the Pharmaceutical Society intends, within any time that can be specified, to propose such regulations to their Lordships. He concludes by asking for a specific and early answer upon the matter. The journal of the Pharmaceutical Society has, within the last week or two, contained many communications in which the objections to the simple alternative plans of keeping poisons proposed by the Council of the Society are ventilated; but we fail to find any valid objection stated, except it be the expression of an opinion that "educational legislative measures already obtained, and self-interest, are sufficient guarantees to ensure every precaution being taken to avoid risks." But, as we have again and again observed, it is not enough for the public that every man should be allowed to "do what is right in his own eyes." Mr. Simon states very definitely what the Privy Council conceives the intentions of Parliament to have been; and the Pharmaceutical Society, in accepting the Act of 1868, acknowledged the obligation put upon it of originating or accepting proper regulations for the keeping of poisons. The present communication from the Privy Council conveys its own meaning, and gives no uncertain note.

QUEEN'S HOSPITAL, BIRMINGHAM.

IN spite of the energy and liberality of the working men, the extension of the Queen's Hospital in Birmingham demands still greater exertions on their part. They will be the directest gainers by the addition to the hospital; and it is quite a proper thing, therefore, that they should be also the largest subscribers to it. At a public meeting held on Saturday, December 31st, the president, Mr. George Dixon, M.P., stated that, since February of last year the officers of the Extension Fund had received £3173, of which as much as £2350, or three-fourths, had been subscribed by working men. Considerable as this sum is, it goes but a little way to meet the expenditure required for such an undertaking as the extension of the hospital; while it is far below the subscriptions raised for similar purposes in other towns, where the local necessity for hospital accommodation is not so urgent. In North Staffordshire, where the population is less than in Birmingham, the working men have contributed £2342 during the year for hospital purposes. In Edinburgh, which is not a commercial town, and where the casualties are few, £1425 had been raised by the working men for the infirmary—a sum more than double that subscribed at Birmingham if its proportion to the population be considered. In Dundee nearly four times, and in Glasgow more than four times, as much as in Birmingham, in proportion to the population, have been subscribed by the working men for hospital accommodation. It seems that the whole of the working classes of Birmingham have not been reached by the collectors, and that if the inhabitants of the city would but subscribe one penny per week for a period of one month, the entire sum wanted (£5000) would be raised. Other speakers followed up the remarks of the president by urging on the working men the duty as well as the advantage of taking their own charities into their own hands; Mr. Geo. Dawson observing that a man earning £2 a week had no more business to come to him for a hospital ticket than to ask him for a new shirt. Resolutions embodying suggestions

for carrying out the subscription scheme with greater efficiency were passed by the meeting unanimously; and Birmingham begins the new year with such good intentions as to her Queen's Hospital that we fully expect to find it extended, completed, and available for its beneficent purposes within the twelvemonth.

SCIENTIFIC TEACHING IN ELEMENTARY SCHOOLS.

A DEPUTATION of the Council of the British Association for the Advancement of Science, numbering some of the most influential names in the cause of education, lately had an interview with the Vice-President of the Council for the purpose of urging the advisability of including elementary natural science among the subjects for which payments are to be made under the authority of the Revised Code. Nothing could have been better than the way in which the reasons for this being done were set forth in the document prepared by the deputation; and we cordially agree with the object they had in view.

It has been far too much the habit of people in this country to instruct children in various subjects without regard to the usefulness of the information afforded, or the future benefit likely to ensue from it. We are far from saying that Mr. Gradgrind's view, consisting of an exclusive "grinding" at facts, expresses an adequate or correct system of education; but, to take the lowest ground, regard ought to be had to the fact that the children will one day have to gain their own livelihoods. To this end, elementary information in certain well-defined subjects, such as physical geography, physics, chemistry, and physiology, cannot fail to be of importance. They will be constantly encountering the facts connected with these subjects in their future lives, and their success and happiness will ofttimes depend upon the knowledge they happen to possess in regard to them. A certain amount of scientific training will, moreover, be the best possible preparation for that technical education of the working classes which has become, as the deputation pointed out, indispensably necessary to the industrial progress of the nation. What an amount of suffering might be saved or mitigated if the most elementary laws of physiology were generally known and acted upon by the next generation of men and women!

SMALL-POX IN LONDON.

THE fatality of the small-pox epidemic in London is rapidly increasing, the deaths returned last week having reached the high figure of 110—a result truly shocking by the prevalence of the disease which it implies. As showing the gradual development of the epidemic, the Registrar-General states that during the first quarter of 1870 the number of fatal cases registered was 99; in the second quarter it was 118; in the third quarter 157; and in the quarter just ended 584. Altogether there were 958 fatal cases registered in the year 1870; and the Registrar-General, comparing the deaths from small-pox during the last five weeks with the deaths in the five weeks of greatest small-pox mortality in 1866, in 1867, and in the precedent severe epidemic of 1863, finds that the weekly average was forty in 1866, forty-six in 1867, and sixty-seven in 1863, while the average of the last five weeks was seventy-one per week.

The disease is evidently spreading in parts of the metropolis which have hitherto escaped the infection. It appears to be ravaging the subdistrict of St. John, Westminster, where, out of a total of 38 deaths registered last week from all causes, no less than 12 were fatal cases of small-pox, nearly all of them being unvaccinated children.

SNOW BLINDNESS.

IN an extract from the letter of one of the correspondents of a German journal quoted in an English paper, it was stated that a considerable number of the soldiers were suffering from blindness, and that this was attributable to exposure to the snow. Before we entirely give in to this view, we should like to be in possession of some further particulars in reference to the nature of the blindness alleged to have been produced. It is quite true that prolonged exposure to the glare of white light reflected from snow, as every Alpine traveller knows, exerts a very powerful and injurious influence on the vision; but many other causes, certainly operating in this war, may occasion similar failure of vision. The exhaustion resulting from severe and long-continued bodily exertion, the strain of the mental powers consequent upon being always required to be *en vedette*, and, lastly, bad and insufficient food, are all causes that every ophthalmic surgeon is well aware may so far reduce the excitability of the retina as to produce temporary blindness; and we should be glad to obtain from competent observers some additional information in regard to the symptoms exhibited by the patients. The points of interest are:—1. Is the blindness greatest by day or by night? 2. Is the perception of the whole field of vision equally dull, or is the central or peripherical portion of the retina chiefly affected? 3. Are the patients capable of distinguishing various colours? 4. Are there any external signs of inflammation? 5. Are there any indications of disease recognisable with the ophthalmoscope?

THE KEITH TESTIMONIAL.

WE confess that we are, as a rule, opposed to the increasing practice of "testimonialising" everybody; but we believe it to be the intention of those interested in a scheme for raising the "Keith Testimonial" to maintain for it a private character, and this fact alone would be sufficient to protect it from adverse criticism. Dr. Thomas Keith has performed ovariotomy with a degree of success that has not been surpassed—nineteen deaths in his hundred operations; and by his success he has greatly contributed to establish the value of the operation. He has a large circle of professional brethren and friends, who hold, and deservedly so, his many excellent qualities in high esteem, and they desire to give a tangible expression of their feelings by presenting Mrs. Keith with a portrait of her husband together with a service of plate. A committee, composed of the most influential members of the profession in Edinburgh, has been formed for carrying it into effect, with the names of Dr. Matthews Duncan and Dr. Arthur Gamgee respectively as treasurer and secretary.

HOSPITAL FOR SICK CHILDREN.

SIR J. Y. SIMPSON used to warn his students that for once they would be called to attend an adult case they would be called three times to attend a child, and urged on them the duty of familiarising themselves, as much as possible, with the diseases of children. The opportunity of perfecting themselves in this branch of their business is too rarely afforded to medical students, and we have, therefore, peculiar pleasure in calling attention to the arrangement just introduced into the Hospital for Sick Children, in Great Ormond-street. Henceforth the practice of the hospital will be thrown open gratuitously to the pupils of the different hospitals and medical schools in London; though not more than four from each school shall enjoy the privilege at one time. The admission will be limited to three months, though renewable on application; but the

pupils so admitted must bring with them recommendations from one of the medical officers or teachers of the schools, while they must receive from the house-surgeon a ticket authorising them to attend the practice. Moreover, the names of the gentlemen admitted, with the date of their admission, and the school they are connected with, must be entered in a book; and if their attendance be regular, they will receive a certificate to that effect. Finally, to enhance the usefulness of the visits, each of the senior medical officers will give clinical instruction at the bedside, or after the visit, once a week. These arrangements, which we may as well inform our readers commence on Tuesday, the 17th inst., will prove a most admirable addition to the too scanty means at present available for an early and thorough initiation in the diagnosis and treatment of the diseases of children.

INFECTIOUS DISEASES AND COMMON LODGING-HOUSES.

THE order issued to the police by Colonel Henderson, in reference to the steps that are to be taken to prevent the spread of contagious maladies in common lodging-houses, is one that has our entire approval, and the Chief Commissioner of Police is to be much commended for the practical step he has taken to put a stop, in one direction, to the existing free spread of infectious diseases in the metropolis. The order directs that when notice has been received of a case of infectious disease at a common lodging-house, the inspecting sergeant is to visit the place, and adopt measures for removing all lodgers from the sick room, if the parochial medical officer has not seen the case. He is then to get an order from the relieving officer for medical attendance upon the sufferer. If this fail to obtain proper treatment of the case, he is to request the nearest divisional surgeon to see it, and do what is necessary, reporting the matter at head-quarters. Further, the sergeant is to see a guardian or overseer, and report the absence or neglect of their officers, demanding at the same time an order for the removal of the patient to a suitable hospital, or the infirmary; or failing this, to get the case admitted without an order at once into some hospital; and, lastly, he is to act under the surgeon's advice, and superintend the disinfection or destruction of infected clothes, bedding, and the like. Precise directions are given in the order as to the mode of disinfection by carbolic acid, and the efficient disinfection of rooms and corpses. The order is a very practical one, and we hope that the medical officers of the Poor-law system will do their utmost to assist in giving due effect to its injunctions.

THE DANGERS OF THE FROST.

THERE is a reverse side to every picture, and a bright, frosty Christmas brings with it privations and dangers as well as feasting and the inexhaustible amusements of the ice. Among the dangers, and associated in not a few cases with the feasting, is an enormous number of accidents caused by the slippery condition of the streets. We have been favoured with returns from nearly all the metropolitan hospitals, which enable us to give the following account of the more severe accidents which had been admitted into the wards up to the commencement of the present week:—London Hospital, 108; St. Thomas's, 29; St. Bartholomew's, 25; Westminster, 14; University College, 11; Charing-cross, 10; Middlesex, 8; King's College, 5; Great Northern, 1—making a total of 211. In comparing these figures, it should be borne in mind that considerable difference of opinion exists at the various hospitals as to the degree in severity which entitles an accident to admission. The following is an analysis of 57 cases, of which we have received particulars:—Fractures of the tibia and fibula, 26; fractures of the tibia, 2; fractures of the fibula, 3; fractures of the radius and ulna, 6; fractures of the clavicle, 3; fractures of the humerus, 2; fractured rib, 1; fractures of the femur, 6; dislocation of the femur, 1; fractures of the patella, 3; cerebral concussion, 1; spinal concussion, 1; and strangulation of previously existing herniæ, 2, occurring in people who had sustained falls. The number of accidents treated as out-patients is, on an average, seven times as great as those admitted.

TREATMENT OF WOUNDS BY PNEUMATIC OCCLUSION.

ONE of the last numbers of the *Gazette Médicale de Paris* contains a suggestion by M. Guérin for treating wounds by the exclusion of the atmosphere. This is accomplished by placing over the wound a small sac or cylinder of caoutchouc, to the extremity of which a pipe is inserted that is attached to a balloon or chest destitute of air, and which consequently exerts a constant suction power over the seat of injury. By this means, according to M. Guérin, the approximation of the edges of the wound, and their consequent healing by first intention, is facilitated, while it prevents the absorption of pus. By this means, in fact, the wound is placed in the condition of a subcutaneous injury, or, even if this be not completely effected, the period of inflammatory swelling of such wounds when exposed to the air is shortened; whilst, if there be much loss of substance, it promotes the exudation of plastic lymph, and the formation of a cicatrix. He relates various cases of injury he has treated successfully by this means.

MUSHROOMS IN PARIS.

MUSHROOMS enter much more largely into the *menu* of the Latin races than into our own; and we shall certainly be surprised if Paris has not cultivated the edible during her investment. The nitrogenous matter contained in the *Fistulina hepatica* gives it the flavour and even the nutritive quality of beef-steak; the same element makes the *Agaricus deliciosus* resemble lamb kidneys; while puff-balls, when cooked, have the taste of sweetbread; *Hydna*, that of oysters; and *Agaricus heterophyllus* that of crawfish in the form of bisque soup. No doubt these varieties of the mushroom belong to British more than to French soil; but the artificial cultivation of edible fungi has made vast progress in France—as in the well-known instance of truffle (*Tuber æstivum*). The extensive area of cellarage in Paris, and, above all, the environs, where so many trees have been cut down and vegetable mould is abundant, must form an excellent *nidus* for mushroom spawn. At Rome, we believe, the yearly-taxed mushrooms average between 70,000 and 80,000 pounds in weight; and had the Eternal City been invested like Paris, we have little doubt the quantity would have been trebled by artificial cultivation. Recourse to edible fungi as food seems such an obvious step in the circumstances of the French capital that we wonder it has never been mentioned by "besieged residents." *Nous verrons.*

CLARK'S WATER-SOFTENING PROCESS.

PROFESSOR FRANKLAND, in his report on the quality of the metropolitan water-supply during December, again refers to the excellent effect of Clark's water-softening process, as applied to his own domestic supply from the Grand Junction Company. The water so treated, he says, is bright and sparkling, and pleasant to the taste; unlike the water in the state in which it is delivered by the Company. The softened and purified water "does not curdle

soap and block up the pores of the skin with an unctuous and dirty solid," when used for personal ablution. No one who has experienced the discomfort of washing in London water during the present severe weather, but will hope that the repeated expression of Dr. Frankland's opinion as to the practicability of applying this process to the London water-supply will have its due weight when the promised legislation on the general question takes place.

RESPIRATION IN FEVER.

DR. LEYDEN (*Deutsches Archiv*, 1870) observes that the respirations are usually accelerated in febrile conditions, though not demonstrably in relation to the degree of augmentation of the animal heat. This may, perhaps, be due to increased excitability of the nerves and heart, and to increased metamorphosis of tissue. The central point to determine, however, in regard to this subject, is whether there is an augmented excretion of carbonic acid, and to ascertain this Dr. Leyden adapted an apparatus which could be readily applied to patients labouring under various kinds of affections accompanied by febrile states of the body, as recurrent fever, typhus fever, pneumonia, &c. In four series of observations, with twenty-nine experiments, there was constantly an increase in the depth of the respirations in the proportion to the normal of rather more than 1½ : 1, whilst there was a diminution in the percentage amount of carbonic acid eliminated of 3 : 3½; so that, on the whole, there was an augmentation in the amount of carbonic acid discharged in fever in the proportion of 1½ : 1.

DR. RICORD.

CONSPICUOUS among the non-combatant leaders of the defence of Paris, Dr. Ricord continues his able and indefatigable services among the sick and wounded. "Ubiquitous" is the epithet most commonly applied to him. According to Mr. Labouchere, the author of the "Diary of a Besieged Resident," which forms one of the most entertaining features of the *Daily News*, the doctor is to be seen driving about in a basket pony-chaise drawn by two ponies "not much bigger than rats!" He sits in a long coat buttoned up to his chin and coming down to his feet, while a pole bearing the flag of the Geneva Cross is planted beside him. The equipage may not be very dignified, but Dr. Ricord can afford to despise appearances, particularly when professional duty of so miscellaneous and arduous a kind keeps him constantly at work in one ambulance after another. His chronicle of the medical aspects of the defence of Paris will be not the least interesting of the many books which the close of the war will vouchsafe to an eager and inquisitive public.

FOOD ADULTERATION IN DUBLIN.

TEN wholesale manufacturers of sugar confectionery have been summoned before the magistrates in Dublin under the Food Adulteration Prevention Act. An officer of the Corporation proved the purchase of various items of confectionery sold by the defendants. Dr. Cameron, the City Analyst and Professor of Public Health, had examined 130 different samples purchased at thirteen establishments, in only three of which the articles were found to be pure; vermilion, chromate of lead, and an earth called terra alba had been used in the adulteration. In one case two grains of vermilion had been obtained from half an ounce of red sugar. In other confectionery there were aniline colours, gamboge, gum, and starch. The magistrates fined the defendants in various sums, in one case to the extent of £5 and £3 costs.

BEET-ROOT DISTILLATION.

A REPORT on the culture of beet-root in Great Britain, and the distillation of beet-root spirit, by Dr. Augustus Voelcker, F.R.S., has recently been published, and we are glad to give prominence to the subject because the cultivation of the root for the purposes of distillation is likely to gain ground in this country, having been carried on in France, Germany, and Belgium for more than a quarter of a century. From this report, it appears that there are five chief varieties of beet, of which the Silesian is most largely grown, as it produces the greatest weight of roots and of sugar per acre. Sugar-beet is now grown in Suffolk, Berkshire, and Surrey, and the average amount of sugar obtained from these roots is from 9½ to 10½ per cent. The report is published at the instance of Messrs. D. Savalle and Co., who have fitted upwards of 350 beet-root distilleries in Europe, and seven only in Great Britain, five of which are at Bascot in Berkshire, one at Leith, and one in the neighbourhood of Norwich.

STREET ACCIDENTS.

THE total number of fatal street accidents from horses or vehicles in the London streets registered during the year 1870 was 198. An estimate of the Registrar-General, based on the experience of former years, gave 225 as the probable number of such accidents likely to occur in the year; consequently the actual number is less than the estimated number by 27. Of course these figures fall short of the true exponent of the "dangers of the streets," inasmuch as they take no account of the large class of accidents which, although they do not immediately destroy life, yet in very many cases maim and injure persons for life. It is most desirable that some endeavour should be made to ascertain the total number of street accidents, whether fatal or otherwise, occurring every year, not in London only, but in all our large cities and towns; and, as all such events are matters of public occurrence, there ought to be no insuperable difficulty in the way of such a co-operation of the police and hospital authorities with the Registrar-General as would lead, at any rate, to a tolerable approximation to the truth. There is a popular notion that it is the fast traffic which is most dangerous to street pedestrians; but, so far as the Registrar-General's Returns go, they show that the fatal accidents, at least, are caused in far larger proportion by heavy vans and carts than by lighter but more rapidly passing vehicles.

THE POOR-LAW MEDICAL SERVICE.

WE draw the attention of our Scotch readers to the proposal of Dr. Rogers for the establishment of a Poor-law Medical Officers' Association for Scotland. Such an association would be calculated to secure for the poor better medical attendance and for the medical officers better pay, whilst the co-operation of the associations in the three kingdoms would certainly help forward the reform of the entire system.

APOTHECARY-GENERAL FOR IRELAND.

A COMMITTEE of the guardians of the South Dublin Union has been appointed to co-operate with the North Dublin and other unions to form a deputation to his Excellency Earl Spencer, relative to the withdrawal of this proposed appointment by the Poor-law Commissioners for Ireland. We are also given to understand that the appointment of an Apothecary-General for Ireland has been submitted to the opinion of eminent counsel, and considered illegal.

THE right of attending the clinical courses in the Royal Infirmary, Edinburgh, along with the regular class has, as our readers are aware, been claimed by the lady students; but, on it being submitted to the managers, the claim was rejected by a considerable majority. From this decision the ladies appealed to the subscribers to the institution. That body held a meeting on Monday last, and, a vote being taken, the claim of the ladies was rejected by 100 to 96. It is believed that the votes of this narrow majority will be taxed.

AT a meeting of the Senate of the Queen's University in Ireland, held on the 22nd ult., Sir Dominic Corrigan, Bart., M.D., M.P., was re-elected as their representative on the Medical Council for the period of one year. Sir Dominic has always represented this University, having been first elected in October, 1858, for the period of five years, and in November, 1863, for a like period. Since then the election has been annual.

THE Medical Committee of University College Hospital have recommended to the Council of the College the appointment of an assistant obstetric physician to the hospital. This appointment, when made, whilst it will meet the steady increase in the amount of work in the department for diseases of women and children, will enable the obstetric professor to devote more time to systematic clinical teaching.

THE first Lettsomian lecture "On Excisional Surgery of the Joints, the conditions appropriate for excision, the operation, and the after-treatment and results," will be delivered by Mr. Gant, at half-past eight next Monday, at the Medical Society of London, 32A, George-street, Hanover-square, W.

AN arrangement has been entered into with the Committee of the Medical Club by which, in future, the meetings &c. of Council of the Poor-law Medical Officers' Association will be held at the Club. Gentlemen attending Council or general meetings will, on such occasions, be permitted to have refreshments &c. at the Club tariff.

THE total rainfall at Greenwich during the month of December was 3·1 in., or 1·2 in. above the average of the same month in fifty-four years. The total rainfall of the year 1870 was 18·6 in., showing a deficiency of 6·8 in. as compared with the average fall during fifty-four previous years.

THE Birmingham General Hospital has benefited altogether since 1768 by the munificent sum of £96,315 contributed to its funds by the Birmingham musical festivals. The sum realised to the hospital by the last festival was £6195, the largest result ever obtained from the same source.

DR. C. A. HINGSTON'S medical report to the Committee of the Plymouth Dispensary for the three months ended Nov. 30th shows Plymouth to have been very free from epidemic disease, and that it has enjoyed a complete immunity from small-pox.

THE mean temperature at Greenwich was below freezing-point every day last week, the highest point attained being 29·6° on Wednesday. On Christmas-day the thermometer marked 5·5° at Norwich, 7·0° at Leicester, 8·7° at Nottingham, and 9·8° at Greenwich.

DR. BARNES has been elected an honorary member of the Medical Society of Victoria.

APPLICATION is to be made to Parliament in the ensuing session by the Governors of Bethlehem Hospital for power to erect at Witley, in the parish of Godalming, a convalescent establishment supplementary to the hospital.

MR. VICTOR DE MÉRIC is proposed as the new President of the Harveian Society.

THE WAR.

A MILITARY SURGEON'S OPINION OF THE GERMAN MEDICAL ARRANGEMENTS.

Surgeon Manley calls attention to a great defect, in that no arrangements are made by the Germans for giving nourishment to the wounded either on the battle-field or after they are brought in. He is, no doubt, quite correct in saying that this matter ought even to rank in importance before the dressing of wounds. From what we can learn, too, the German system of evacuating all their hospitals at the front, or along the line of active operations, is attended with terrible suffering to the patients, and the movement of cases so soon after injury or operation is very inimical to the successful progress of wounds. Some surgeons, we understand, who had established ambulance hospitals as independent charges, strenuously opposed the removal of their cases, and with the effect of obtaining better results from their surgery. On the other hand, it is right to say, in favour of this regular, systematic plan of evacuating hospitals, that it rids the army in the field of a great source of delay and weakness, economises the labours of transport in maintaining the supplies for innumerable hospitals, liberates to a great degree the medical service to follow the troops on march, and lastly, it tends to avert the evils that would necessarily ensue from the prolonged occupation of buildings generally quite unfit for hospital purposes.

THE ENGLISH *versus* THE GERMAN AMBULANCE WAGGONS.

We believe that the result of an extended series of comparative trials in this country of the different kinds of waggons has led to the opinion that our English pattern is, upon the whole, the best, notwithstanding that it was thought so antiquated at the Paris Exhibition as to have been called "Noah's ark." When rendered of lighter construction, and with some modifications that may be easily introduced, it is considered that the English pattern is the best for our purposes as an insular Power. We now learn that after the engagement at Forçay, the Prussians put all their more serious cases of wounded into the English waggons, in consequence of their being steadier and less liable to jolt than their own.

THE HOSPITALS AT ORLEANS.

IF the tide of war has for the time rolled away from the districts around Orleans and Tours, it has still left the most fertile parts of France barren as a desert. Forsaken villages, starving peasants, and wounded and crippled men meet you everywhere. A correspondent lately writing from Orleans gives us a terrible description—but that such scenes are no longer of rare occurrence — of the hospitals in and around that city. Nothing, he says, could have exceeded the utter disorganisation that existed. It far surpassed anything that prevailed at Scutari in the worst of times. It was not until after an interval of some days after the battles that any of the heavier *matériel* arrived for the hospitals. Overcrowding, dirt, foul smells, want of the commonest things, and an absence of all administration prevailed on every side. Our correspondent visited a large number of hospitals, and in one there were upwards of

700 cases of disease, chiefly cases of typhoid fever and small-pox. The mortality was, upon the average, two daily. A sick soldier has to apply to the *Etapen Arzt* for an order for admission to hospital. A Prussian, after endeavouring in vain to get access to hospital, managed to admit himself amongst the wounded of the Anglo-American ambulance. He was found to be labouring under small-pox, and, of course, had to be discharged.

THE AMERICAN AMBULANCE IN PARIS.

The Americans are a very practical people, fertile of resources, apt and energetic in administration. At the close of their late war, their Surgeon-General boasted that never before in the history of the world had such an amount of success attended military surgery as was shown by their statistics. Their ambulance in Paris is allowed on all hands to be admirably organised and administered; their surgery is good, and the results of amputations and excisions very gratifying. Their wards have hitherto, it is said, been free from diseases incidental to defective sanitation.

THE GERMAN MEDICAL OFFICERS.

There is no nation in the world where tradition, caste, and military rank exert such a powerful influence as in Prussia. Individually, the Prussians are an intellectual, energetic, self-sustained, and liberal-minded people; politically, however, Germany is a vast camp, and liberty of speech and action, such as we possess in England, is unknown. With all their love of organisation, the Prussian military aristocrat would not think of granting the officers of the medical service the necessary rank or power to render their department thoroughly effective. We are assured that the shortcomings of the Prussian medical service have been attributable to this cause. The medical officers obtain little regard; indeed, to use the language of a correspondent, "the medical officers, their hospitals, their sick, and even their wounded, are commonly regarded as encumbrances."

THE WOUNDED AT MEUNG.

A correspondent informs us that towards the end of December the sanitary detachment of the Prussian army was ordered to Chartres, and they had to leave their wounded at Meung, where for some time they were in want of everything. Many days after the battle they were lying upon stone floors, with the scantiest possible clothing, in a draughty edifice, exposed to currents of air, with the thermometer many degrees below freezing point.

HOSPITAL AND ROYAL STABLES COMBINED.

At a large hospital in Orleans, under the charge of a Dr. Gände, who had displayed immense energy in getting things in order, a curious combination existed. The rooms beneath the small-pox wards were occupied by Prince Frederick Charles's horses, and it does not appear that any representations which might have been made had availed in getting them removed. Possibly if it had been hinted to his Royal Highness that his grooms were in danger of catching the disease, and conveying the infection, the stables would have been speedily evacuated.

THE ENGLISH MILITARY AMBULANCE.

As our readers are already aware, the ambulance fitted out by officers of the Army Medical Department for the English Society of the Geneva Convention, originally proceeded to Versailles, under the direction of Deputy Inspector-general Dr. Guy. The hospital which was opened in the German lines was, after a brief existence, broken up, and the patients handed over to the German military surgeons. The ambulance was then divided into three sections, one of which, under Surgeon Manley, V.C., Royal Artillery, proceeded in the direction of Chartres, where it joined the 22nd division of the Prussian army. This ambulance was present at the engagement at Forçay, where it rendered effective service in collecting and treating the wounded, and the waggons were then ordered to Châteauneuf, where a hospital had been established, thence to Bretoncelles, and, subsequently, Mr. Manley's ambulance was at the general action fought at the village of Bagenix. Very effective service seems to have been rendered at these places. At Anneux a farm-house was appropriated as a hospital, and arrangements were made for the reception and treatment of the wounded. The waggons were sent to the field at ten o'clock at night to collect the wounded that were still left there; and it was not until three o'clock the following morning that they were all got in. Many important operations were performed, and the wounded soldiers were provided with stimulants, extract of meat, &c., of which they stood much in need, for the weather was intensely cold, and the men were terribly exhausted from their wounds and from exposure on the field. Dr. Guy's section of the ambulance proceeded to Beaume-la-Rolande, where they took care of all the French wounded in the town, besides which their waggons were constantly employed in transporting wounded French and Prussians. The third section, under the charge of Staff-Surgeon Ball, took charge of the wounded who had been left at Pithiviers, about 14 miles from Beaume-la-Rolande. The three divisions were kept supplied with the necessary stores from the depôt of the National Society at Versailles.

THE WAR STRAIN ON GERMANY.

The railways no longer sufficing for the transport of the enormous requirements in munitions, clothes, and provisions for 650,000 German troops, long trains of waggons have been employed. It takes about seven weeks to make the journey from Dresden to Nancy, and thence to Versailles. The sick and wounded, conveyed in open goods' trucks, and large numbers of French prisoners on uncovered coal-waggons, with their insufficient food and clothing, undergo great suffering.

THE HOSPITAL AT DARMSTADT.

There is only one English hospital under English management in Germany, Colonel Loyd Lindsay tells us—viz., that established at Darmstadt by Dr. Mayo at the commencement of the war. It is not a little creditable to Dr. Mayo's administrative and medical skill that it has been a great success. He has about 100 cases under treatment, chiefly of a medical character, such as fever. Dr. Mayo has had some experience of war medical service, having been engaged as a medical volunteer during the great American war.

SMALL-POX AMONG THE GERMANS.

This disease prevails to a greater extent than is generally known among the German troops; and the cause of it ought not to be without its effect in conveying a lesson to our own Government. Vaccination, as is well known, is always practised in Prussia; but revaccination was not so commonly resorted to until after the campaign of 1866. A very considerable number of men who served then are taking part in the present war, and revaccination has, consequently, not been commonly performed among these soldiers.

THE COLD AND THE BESIEGED.

The frost in and around Paris has been of almost unexampled severity. Trochu's troops outside the city suffered terribly. The correspondent of the *Daily News* states that no fewer than fifty sentinels had been frozen to death. Possibly there may be some exaggeration in these numbers; but we have learned that a great many cases of frost-bite are undergoing treatment in the military hospitals in Paris. Fuel is running short in the city, and food is getting

scarcer. The amount of disease and mortality from pulmonary complaints, typhoid fever, and small-pox, already large, was daily increasing, and the sufferings of the people are, on all hands, represented as being great. According to political papers, no less than 500 people die weekly of small-pox in Paris. It is impossible, under such circumstances, to withhold our sympathy and pity, or not to feel admiration for the unexpected fortitude which the Parisians are displaying in what, it must be remembered, they consider the cause of patriotism and right.

THE MEANS OF RECOGNISING THE DEAD AND WOUNDED IN THE PRUSSIAN ARMY.

Every soldier at the beginning of the campaign wore, by means of a string, on his bare chest, a plate, bearing his name, regiment, &c., in order to facilitate the returns of the dead and wounded. This measure has proved inadequate, and the Government have just ordered, at Berlin, block-tin lockets, the size of a five-shilling piece. In these a paper is inserted, bearing the information above alluded to, and it is hoped that they will answer the purpose.

THE HEALTH OF LIVERPOOL.

THE sanitary returns of Liverpool show that the epidemic of relapsing fever has passed the climax. The number of cases in the parish workhouse has diminished from 1114 at the commencement of December to 896 at the end of the month, and the new admissions weekly have been 248, 253, 216, and 192. The number of new cases treated by the district medical officers is still very large, the numbers being 260, 259, 211, and 202, making a total of 932 cases in the month.

In Toxteth-park there are still 300 patients in the workhouse infirmary, but the number under treatment by the district medical officers has declined from 540 on the 1st of December to 196 on the 24th. The number of new cases has also diminished in the same proportion.

At the West Derby Workhouse there were 75 cases of relapsing fever between the 15th and the 30th of December.

The temporary Fever Hospital at Anfield-road has been closed against the admission of fresh cases since the 15th. 153 cases were admitted during the month, and the deaths were 6.

The epidemic of small-pox is becoming very serious in all parts of Liverpool. The first cases were admitted into the parish workhouse in the week ending October the 22nd. On the 5th of November 15 cases were under treatment. Since then the weekly admissions have increased, as follows: 10, 6, 21, 5, 22, 37, and 35. The number in hospital had risen to 66 on the 24th of December. During the last week the district medical officers have apparently been obliged to treat some cases at home, as out of 17 only 4 were sent to hospital. Small-pox has been, and still is, very severe in West Derby. There have been 38 admissions to the Fever Hospital and 141 to the workhouse. Most of the cases have been confluent, and the mortality has been 20 per cent.

Notwithstanding the presence of so much disease and the great severity of the weather during the last few weeks, there is, as compared with last year, a considerable diminution in the number of families in the receipt of parish relief, and the total number of out-door paupers is 1148 less than last year. This fact is conclusive against the theory that relapsing fever is caused by famine or excessive destitution. The mortality of scarlet fever continues high, 112 deaths having been registered in three weeks.

Looking at this exceedingly unsatisfactory state of things, we regret to find that the inquiry of Drs. Parkes and Sanderson has been postponed till March, Dr. Parkes being fully engaged up to that date. This might certainly have been avoided by a reference to the Privy Council.

Correspondence.

"Audi alteram partem."

THE LANCET MEDICAL ACT AMENDMENT BILL.

To the Editor of THE LANCET.

SIR,—You have propounded an amended Medical Bill, certainly the best the temper of the times and of Parliament admits of, and which cannot fail to ensure the cordial approval and acceptance of the whole profession, save with those unfortunate exceptions where immemorial privilege and vested interests are jeopardised. There is nothing so stretched or stringent in its provisions, but that the most tenacious retainers of crumbling and obsolete "landmarks" may not concede; and nothing so abated from the real demands of the reforms needed as to give us a measure denuded of its strength, fallacious in its safeguards, or illusory, or futile for the objects aimed at—correctives of evils,

> "Keeping the promise to the word,
> But breaking it to the hope."

Such being the case, you ask—and have a right to ask, as, on this occasion at least, the representative head of the professional mind and body, and at all times the true exponent of its progress, and the trusted champion of its interests—you ask "will the profession help you to pass your Medical Bill"? Doubtless you pause for a reply. Let the pause be short, and the reply utter no uncertain sound. "The profession must adopt it, and must take upon itself to have it passed through Parliament." Here is your challenge. Will the professional masses make it the point of honour to carry your—their measure? I believe they will; and to a man. What then is wanted but to be "up and doing"? Let practitioners of all grades bestir themselves, from London to Land's-end. "A long pull, and a strong pull, and a pull altogether" is the immediate requisition, and will be the talisman of success.

For once, at least, the profession must be united. If the *esprit de corps* has waxed weak, it must be strengthened. The things that have combined to separate brethren—*amour propre* violated, sensitive toes trodden on unwittingly and unwillingly in the *melée* of daily life, the paltry jealousies of jarring interests, animosities and feuds founded generally on misconceptions of character and conduct—all should now be ignored or healed. Not only co-operation but organisation is needed. The measures which I would beg humbly to submit to the profession to ensure the passing of THE LANCET Medical Act Amendment Bill are as follows:—

1. The formation of a grand Practitioners' League, its head and heart in London, and its body and extremities everywhere. No time should be lost to organise it, with president, vice-presidents, secretaries, treasurers, managing committees, and travelling agents, if necessary.

2. Local meetings of the profession, as you suggest, should be held at once, in every part of the country, for ventilating the questions at issue. This will be equivalent to the distribution to an army of the Snider rifle in lieu of the old "brown Bess."

3. As the registration courts were the true battle-field of the Reform Bill, so the whole success of the present agitation will lie in the personal influence and efforts of the individual members of the League with their Parliamentary representatives.

4. The press must be set to work. Copies of THE LANCET Medical Bill should be sent to every member of both Houses of the Legislature, with a suitable appeal for consideration and support of the measure, &c. Copies should also be sent to the law lords, eminent barristers, church dignitaries, heads of colleges, professors, country gentlemen, &c.

I am, Sir, your obedient servant,

Sheffield, Dec. 21st, 1870. J. BALBIRNIE, M.A., M.D.

THE PROFESSION IN LEEDS.

To the Editor of THE LANCET.

SIR,—Allow me to call your attention, and that of your readers, to the lowness of the medical fees in Leeds and its neighbourhood. As a rule, if a medical man wishes to get on here, he must conform to the general rule, and charge the magnificent sum of eighteenpence for a visit upon a working man, who lives in a ten or twelve pound house, and pays rates. This fee also is the same even if medicine is sent out. Again, to a person who lives in a forty or fifty pound house, half-a-crown for a visit and medicine is considered quite sufficient. A shopkeeper, with a good business, will, in some parts of the town, haggle with a professional gentleman till he gains his end by obtaining a reduction of, say, a two pound bill to twenty-five or thirty shillings. A medical man begins practice, and in order to get patients he charges very low. He gets on, and still sticks to the same fees in most cases; the consequence is that the patients are ruined, and it is difficult for another medical man, who wishes to uphold his profession, to get on. A person employs him, he does his duty and attends well to his patient, sends his account in, and is told that Dr. So-and-so did not charge more than eighteenpence for visit and medicine. This is no solitary case, for the system of underselling is carried on in nearly every quarter of the town. The profession is split by petty jealousies, instead of being united for their mutual protection. Of course there are many honourable exceptions. Clubs are taken at half-a-crown per member per annum; and I can assure the readers of your valuable paper that a club appointment is striven for most vigorously. The clubs in Leeds are our masters at present; how long we shall be in subjection to them depends upon the efforts of medical men themselves to reform these abuses. Whilst I am on this subject, I may as well state that the fees for midwifery are fifteen shillings, if paid in the month, afterwards a guinea. This is very good if we could only be paid, but many a fee we lose for want of a better regulation. The only plan to obtain our fee in these cases is to let it be an understood thing that as soon as a labour is over the fee is to be paid down. It is as easy to pay it at once in such a case as within a month. I trust these remarks may be followed by a new era for good in Leeds. Let the medical men of this town, and throughout England, combine to raise our profession, and to exemplify the motto "Union is strength."—I am, Sir, yours faithfully,

H. ARTHUR ALLBUTT, L.R.C.P. & S.

Russell Lodge, Sheepscar-street, Leeds, Dec. 21st, 1870.

NAVAL PROMOTIONS.

To the Editor of THE LANCET.

SIR,—There is a letter in your issue of to-day, signed "Causticus," which I think all honest men will regret to see, and which requires an answer on public grounds.

I pass over "Causticus's" scandalous invocation of the Contagious Diseases Act, under cover of which he attacks the two late promotions to the rank of Deputy Inspector-General of the Navy, as if they were "quod hoc propter hoc," by saying that in the one case the rank is merely honorary, and to be held only during the time the position of inspector of hospitals under the Act in question is held; while in the other the appointment held under the Act was accepted only on condition that it did not interfere with his advancement in the service; and that in both cases these officers endeavoured zealously and laboriously to carry out the provisions of an Act passed by the Legislature, and approved by the profession; and that, instead of being a reward for their services in this respect, promotion was but a fitting climax to like zealous and skilful professional duty, performed in both cases for a period considerably over a quarter of a century in all quarters of the globe.

Under a jumble of spite, Mars, Venus, Juno, and stale Latin quotations, I can gather that "Causticus" objects to these promotions because neither of the recipients had been engaged before the enemy, or held an appointment as staff-surgeon in a hospital. I answer that these cannot fall to the lot of every man in the service, and that it would be a gross injustice to pass over men of high standing, professionally and otherwise, who have done their duty with skill and zeal in other spheres, simply because some other man, perhaps much junior, had been engaged in some obscure warfare, or held an appointment indifferently well in a naval hospital. Has there been no practice in the Navy on which to found a reputation, except in our hospitals, or in some skirmish in China, or a few cases seen during a winter in the Crimea? Any fool may have been fated to see service before an enemy. It will not, therefore, qualify him for the highest honours of the profession. Men of very ordinary ability have held appointments in hospitals, and failed most signally in showing that they merited further advancement.

On the whole, I repeat that it is to professional ability alone that you are to look in the men who are to hold the most responsible positions in the Navy; and I feel certain that, viewed in this light, the promotions in question will be received with perfect approval by the service generally.

I trust to your sense of justice to give insertion to this letter.—I am, Sir, your obedient servant,

December 31st, 1870. A STAFF SURGEON, R.N.

Obituary.

DR. W. CALLENDER TIDY.

DR. W. CALLENDER TIDY, whose death took place on Christmas Day, at his residence, The Hollies, Mare-street, Cambridge-heath, Hackney, at the age of seventy-two, had been in general practice in the district upwards of forty years. The Doctor was a native of North Shields, where he received a good education in the classics and in mathematics. On leaving school, he was placed as a pupil to the late Mr. Trotter, a surgeon of great repute in North Shields, in whose surgery he continued for six years. Though the time may appear long for a medical apprenticeship, with Dr. Tidy it was not time wasted, as he embraced the opportunity for reading general literature and elementary scientific works, and in studying pharmacy; but especially it enabled him to become an adept in minor surgery. At the termination of his apprenticeship he came to London and entered as pupil at the Middlesex Hospital. In 1821 he became a member of the Society of Apothecaries, and in 1822 a member of the Royal College of Surgeons. On receiving his surgical diploma, he accepted an appointment as assistant to a surgeon in the country, which he held for a short time. He returned to London, and purchased a small practice at Cambridge-heath; and in 1834 he married. After his marriage he cultivated his practice with increased energy, and from that period he had no reason to dread the *res angusta domi* which so many practitioners have had to contend with; on the contrary, he was possessed of ample means, and surrounded by all the domestic comforts which make life enjoyable. It was not until 1852 that he graduated at King's College, Aberdeen. Dr. Tidy has left a widow, three sons, and one daughter. The eldest son holds an appointment in the civil service in India, the second is in the Church, and the third is attached to the London Hospital as lecturer on chemistry. The Doctor's death is a severe bereavement, which must be keenly felt alike by his family, his friends, and his patients. He lived the life of a good Christian, and died a true believer.

THOMAS ROSS, M.R.C.S., L.S.A.

IN the decease of this most estimable practitioner the West Riding has lost one of the old school who, modernised in sentiment and culture, linked the present with a past generation. Mr. Ross was a student of the Borough Hospitals and of Grainger's School, and settled early in Wakefield, where he continued to practise till a few months ago.

HOSPITAL SUNDAY AT LIVERPOOL.—The Mayor of Liverpool, at the Council meeting held this week, announced his intention of marking his approval of the Hospital Sunday movement by attending the parish church of St. Nicholas in his official capacity on Sunday next, which is the day selected for the simultaneous collections in all the churches and chapels of the town in aid of the public hospitals.

Medical News.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 22nd and 29th of December :—

Deane, Robert Edmund, Batley, Yorkshire.
Evans, Ernest Richard, Evelina Hospital.
Garland, Henry, Walworth-road.
Hughes, Evan Thomas, Anglesea.
Longhurst, Alexander Keene, Farnham, Surrey.
Netherclift, William Henry, Whitchurch, Hants.
Wykes, Edwin, Birmingham.

As Assistants in Compounding and Dispensing Medicines :—

Brown, James, Rugby.
Chitty, Frederick, Titchfield, Hants.
Hackett, John Henry, Tallington, Stamford.
Spong, Douglas Morton, Biggleswade.
Wilkes, John Sanders, Leicester.
Woolstencroft, Joseph, Northwich, Cheshire.

The following gentlemen also on the same days passed their first professional examination :—

Frederick Irving de Lisle, Norman Bruce Elliot, Joseph Kingdon, Robert Alexander Lithgow, Geo. Joseph Llewellin, Charles Edw. Whitington, and Edward George Younger, Guy's Hospital ; John Hughes Penkivil, Walter Alfred Ward, and William Charles Bland, St. Bartholomew's; William Renton, Leeds ; Francis Henry Spencer, King's College.

PATHOLOGICAL SOCIETY OF LONDON.—The following gentlemen have been elected officers for the year 1871 :—President : Mr. Hilton, F.R.S. Vice-Presidents : Drs. Edwards Crisp, Herbert Davies, Quain, Wilks ; Messrs. Cooper Forster, Gay, Holmes, and Simon. Treasurer : Dr. Murchison. Honorary Secretaries : Dr. Dickinson and Mr. Hulke.

THE LABORATORY OF PHYSIOLOGY AT ROME.—Dr. Meriggia, a pupil of Professor Moleschott, has just been appointed director of this laboratory. On this occasion the eminent professor presented to his former disciple a collection of preparations illustrating the whole range of physiological science. This is a most magnificent gift, as the most distinguished physiologists and chemists are known to have contributed to the collection.

REJECTIONS AT EXAMINATIONS IN PRUSSIA. — In the nine Universities of Prussia, the commissioners examined, for the licence to practise, 434 doctors and candidates in medicine. Out of these 302 were declared fit and proper for practice, hence there were 132 rejections. It should be understood that among the latter there were doctors of medicine, exactly as diplomated candidates for the army and navy are, in this country, sometimes found unfit for a commission.

SIR PATRICK DUN'S HOSPITAL, DUBLIN. — At a meeting of the Board of Governors, held on the 27th ult., the following resolution was passed :—"That the board of Sir P. Dun's Hospital desire to express their hearty gratitude to the ladies of the Dublin Nurses Training Institution Committee, for the zeal and charity with which they have collected subscriptions for the hospital to the amount of £273, for the purpose of maintaining additional beds during the year 1871."

Medical Appointments.

ARNOLD, R. O., L.F.P. & S. Glas., has been appointed Medical Officer and Public Vaccinator for the Rumboldswhyke District of the Westhampnett Union, Sussex, vice R. Elliott, F.R.C.S.E., resigned.

BUCHANAN, Mr. W., has been appointed Medical Officer for District No. 2 and Workhouse of the Medway Union, Kent, vice Wm. Prideaux Adams, M.R.C.S.E., deceased.

BURGESS, W. F. R., M.B., M.R.C.S.E., has been appointed House-Surgeon to Guy's Hospital for March and April, and Obstetric Resident for January.

CRESSWELL, N. E., M.D., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Manhood District of the Westhampnett Union, Sussex, vice F. J. Freeland, M.R.C.S.E., resigned.

CURRAN, J. W., L.K.Q.C.P.I., L.R.C.S.I., has been elected Surgeon to the Mansfield Woodhouse Infirmary, vice J. Macnamara, M.R.C.S.E., deceased.

DOBIE, W., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Surgeon to the Police, Bingley, Yorkshire, vice R. E. Ruffe, M.R.C.S.E., deceased.

DOUGLAS, W. S. P., M.B., M.R.C.S.E., has been appointed House-Physician to Guy's Hospital for April, May, and June.

DURHAM, F., M.R.C.S.E., has been appointed House-Physician to Guy's Hospital for January, February, and March.

EAGER, W., M.R.C.S.E., has been appointed Obstetric Resident at Guy's Hospital for March.

FRYAN, Mr., has been appointed Resident Obstetrict-Assistant at the Middlesex Hospital.

GODSON, C., M.R.C.S.E., L.M., has been appointed Registrar at the Evelina Hospital, Southwark-bridge-road.

GORDON, J. G., M.B., has been appointed a Physician's Assistant at the Royal Infirmary, Manchester, vice Pilkington.

GREAVES, Mr. W., has been appointed House-Surgeon to Guy's Hospital for May and June.

HARRIS, M., M.R.C.S.E., has been appointed House-Surgeon to Guy's Hospital for January and February.

HAYNES, H. E., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for District No. 3 of the Evesham Union, vice Oswald New, M.R.C.S.E., resigned.

JEFFERISS, W. R. S., M.B., C.M., L.R.C.P.Ed., L.R.C.S.Ed., late Resident Surgeon and Physician to the Southern Counties Asylum, Dumfries, has been appointed Medical Officer and Public Vaccinator for the Penderyn and Rhigos Districts of the Merthyr Tydfil Union, Glamorganshire.

JOHNSTON, J., M.B., has been appointed an Acting Physician to the Birmingham and Midland Free Hospital for Sick Children, vice J. L. Earle, M.D., M.R.C.S.E., deceased.

KING, R., M.R.C.P.I., B.A., M.B., has been appointed Medical Registrar and Superintendent of Post-mortem Examinations at the Middlesex Hospital, vice J. Murray, M.D., M.R.C.P.I., resigned, and appointed one of the Assistant-Physicians.

LEADINGWELL, W. T. G., M.R.C.S.E., has been appointed Resident Medical Officer at the Eastern Dispensary, Leman-street, Whitechapel, vice J. J. Ilott, L.R.C.P.Ed., M.R.C.S.E., appointed Resident Medical Officer at the Whitechapel Workhouse.

LERSON, H. B., M.D., F.R.C.P.I., has been elected Consulting Physician to the Royal Isle of Wight Infirmary, Ryde, vice D. M'Lachlan, M.D., F.R.C.P.I., deceased.

OLDHAM, C. J., L.R.C.P.L., M.R.C.S.E., House-Surgeon at Guy's Hospital, has been appointed House-Surgeon at the Evelina Hospital, Southwark-bridge-road.

RYAN, J. P., L.R.C.S.I., has been appointed Assistant Medical Officer to the West Derby Union Workhouse.

SMITH, A. W., M.B., M.R.C.S.E., has been appointed Obstetric Resident at Guy's Hospital for February.

SUMNER, W. A., M.R.C.S.E., has been appointed Public Vaccinator for the Parish of Marylebone, instead of the District Medical Officers.

VACHELL, C. T., M.B., L.R.C.P., M.R.C.S., has been appointed House-Surgeon to the Glamorganshire and Monmouthshire Infirmary and Dispensary.

Births, Marriages, and Deaths.

BIRTHS.

CURRIE.—On the 20th ult., at Trinity Hall, Bungay, Suffolk, the wife of J. Legge Currie, L.R.C.P.L., of a daughter.

FOWLER.—On the 8th of Nov., at St. Helena, the wife of Charles H. Fowler, Colonial Surgeon, of a son.

LAWRENCE.—On the 24th ult., at the Cedars, Chepstow, the wife of Dr. Lawrence, of a son.

ROWELL.—On the 9th of Nov., at View-place, Singapore, Straits Settlements, the wife of T. Irvine Rowell, M.D., of a daughter.

SUTTON.—On the 30th ult., at the Norwich Borough Asylum, the wife of Frederick Sutton, Resident Medical Superintendent, of a son.

THANE.—On the 29th ult., at Hampstead-road, the wife of W. D. Thane, M.R.C.S.E., of a daughter.

WILLIAMSON.—On the 27th ult., at Clarendon Villa, Mildmay-park, N., the wife of James Williamson, M.D., of a daughter.

WILSON.—On the 29th ult., at Ayr, N.B., the wife of J. Clark Wilson, M.D., of a son.

WORTHINGTON.—On the 28th ult., at Heene-terrace, West Worthing, the wife of Dr. Worthington, of a daughter.

MARRIAGES.

MACDONALD—HUNTER.—On the 28th ult., at Farmton, Aberdeenshire, George Macdonald, L.R.C.P.Ed., L.R.C.S.Ed., of Markinch, Fife, to Maggie, only daughter of Mr. Hunter.—No Cards.

MAYO—MATTHEWS.—On the 28th ult., at Sporle, Norfolk, Alfred Charles Mayo, M.R.C.S.E., L.S.A.L., of Mildenhall, Suffolk, to Eleanor, third daughter of the late Mr. T. Matthews.

PULLAN—MAW.—On the 20th ult., at Doncaster, Henry William Pullan, Surgeon, of Epworth, to Mary, eldest daughter of Mr. Henry Maw, Farmer, of Field House, Epworth.

SAGAR—FILKIN.—On the 26th ult., at St. George's Church, Leeds, Thomas Henry, only son of Thomas Foster Sagar, Surgeon, of Leeds, to Lilly Eliza Avon, daughter of W. Filkin, late of Birmingham.

THOMAS—SHEPPARD.—On the 29th ult., at St. Bartholomew's, Sydenham, William Thomas, F.R.C.S., of Bradford-street, Birmingham, to Mary Elizabeth, eldest daughter of Thomas Sheppard, Esq., of Lawrie-park-gardens, Sydenham.

DEATHS.

BANON.—On the 22nd ult., at Upham, Richmond, G. D. Banon, L.R.C.S.I., Inspector-General of Hospitals, aged 54.

COGHLAN.—On the 26th ult., at Clarendon-road, Notting-hill, John Joseph Coghlan, M.D., aged 43.

JONES.—On the 26th ult., A. B. Jones, M.R.C.S.E. and L.D.S., of Brook-street, Grosvenor-square, aged 43.

OLIVE.—On the 23rd ult., at Northampton, Emily Katharine, the daughter of Eustace Henry Olive, B.A., M.R.C.S., aged 5 months.

PUGHE.—On the 28th ult., of consumption, Miss Pughe, the daughter of John Pughe, F.R.C.S., J.P. of Brynawel, Aberdovey, and Bron-Dirion, Clynnog, aged 29.

STRICKLAND.—On the 17th ult., Jane, the beloved wife of Edmund Strickland, M.R.C.S., &c., of Ward's-end, Halifax.

SWINEY.—On the 24th ult., J. Swiney, M.D., of Cheltenham, late Member of the Medical Board of India, Hon. E.I.Co.'s Service, aged 87.

THURNALL.—On the 20th ult., at Bedford, W. Thurnall, M.R.C.S.E., L.S.A. aged 54.

Notes, Short Comments, and Answers to Correspondents.

A COUNTY COURT JUDGE ON GRATUITOUS WORK.

WE live and learn; for until this present time we have been under an impression that if there was one profession in this country which more than another exacted ample tribute for even the smallest service rendered, it was that of the law. Never having heard much of gratuitous work done by lawyers, we have taken for granted that they act strictly upon the principle that the labourer is worthy of his hire. But according to the deliverance of the Judge of the County Court held at Chesham on the 12th ultimo, either we have thought wrongly, or he is the exception to a general rule. Mr. Prowse, a medical man, was suing for payment of his fee for attending by request a petty session at Amersham, in order to support by his evidence certain proceedings instituted by the guardians of the union against defaulters under the Vaccination Act. There being no conviction, Mr. Prowse had nobody but the guardians to look to for his fee of 10*s.* 6*d.*—not an extravagant fee surely,—and as they refused to pay, he had no alternative but to bring his action in the County Court. Mr. Prowse appears to have sued the wrong party, the clerk to the guardians, instead of the guardians themselves, and so was nonsuited, his Honour expressing some very lofty sentiments to the effect that every loyal man should be willing to assist in the administration of justice, and should feel it his duty to do so apart from the mere question of payment. For his part he should like to see a different feeling manifested than the expectation of being paid for everything—an idea of which he disapproved. The position of a County Court Judge is so far removed from that of a parish doctor, that it is not perhaps surprising that the one, enjoying a comfortable salary and not overburdened with work, should be quite unable to comprehend that, to the other, time gratuitously given represents just so much diminished income. So far as we have the means of ascertaining how far his Honour personally acts up to his own philanthropic doctrine, we conclude that, like the fox-hunting parson, his motto is, "Do as I tell you to do, and not as I do myself." For a recent Parliamentary Return relative to County Court Judges shows that the Judge of Circuit No. 37, within which Chesham is situate, enjoys a salary of £1500 a year, and that during the year 1869 he sat in Court 128 days. In this particular case, a gentleman receiving out of the public pocket £1500 for less than half a year's consecutive work, yet "disapproving" of the principle of paying other men for work honestly done, appears to us to be rather an anomaly. And, speaking generally, we conceive that a lawyer preaching disinterestedness to a doctor is something very nearly approaching a joke.

Mr. A. S. Drew.—The practice is not illegal, if it be not associated with false pretences to title and qualification.

Dr. Pavy's letter shall be inserted in our next impression.

CHILBLAINS.

To the Editor of THE LANCET.

SIR,—At this season of the year, and especially on the breaking up of the frost, the prevalence of chilblains is very great among nearly all classes of persons. For this prevalent and often painful malady a perfectly safe and effectual remedy is obtainable in the employment of laudanum, taken internally in very small doses of from two drops for young children night and morning, up to six or eight for adults. It is in such quantities perfectly harmless, and, as a rule, will effect a cure in the course of four or five days.

Your obedient servant,
Mount-street, Grosvenor-square, Jan. 1871. F. C. SKEY, C.B.

To the Editor of THE LANCET.

SIR,—The severe weather has caused an unusual amount of suffering to young people from chilblains. I have found an excellent remedy in the new disinfectant, "chlor-alum," for unbroken chilblains. It should be applied undiluted night and morning, using a moderate amount of friction.

Yours obediently,
Clapham-road, Jan. 4th, 1871. GEORGE P. RUGG, M.D.

WORKHOUSE INFIRMARIES ASSOCIATION.

A MOVEMENT is on foot for resuscitating the Association for Improving the Condition of the Sick in Workhouses, and a preliminary meeting of clergymen and physicians interested in the former Association was lately held at the House of Charity, Soho. The resuscitated Association shall have our cordial support; but we would advise them to direct their energies to the real cause of these abuses—viz., the irresponsibility of boards of guardians.

Mr. J. P. Purvis.—The following dispensaries are conducted on the provident principle:—Camberwell P.D.; Dulwich, Hamilton-road, and Lower Norwood P.D.; Hampstead; Haverstock-hill and Malden-road; Islington and North London; Paddington; Portland-town P.D.; S. Marylebone; Wandsworth; Westbourne; Hendon; Chelmsford; Rugeley.

Medical Student.—We do not see any objection to the form in which the announcements are made, considering that they appear in a publisher's circular mainly for the information of the profession.

Sir Henry Thompson is thanked.

Gamma.—For the first performance of medical duty, five guineas would be a fair charge; for the second, two guineas.

THE MEDICAL CLUB.

THIS institution has continued to fulfil its purpose satisfactorily; but the extreme lowness of the original entrance fee and annual subscription proved inadequate to keep it afloat. Dr. Lory Marsh, who had assumed the proprietorship of the Club to save the members from any liability, had to resign rather than incur a loss; but on the proposal being made to raise the annual subscription from three guineas to five guineas for town members, and from one guinea to three guineas for country members, he consented to resume his responsible duties. The proposal was fully discussed and unanimously ratified at the meetings of the Club last summer; and if anyone refused to be bound by the new conditions, he had only to take his name off the books. Considerable dissatisfaction, it seems, has been expressed at the new terms; but we cannot see in the proceedings of the Committee of the Club any departure from the usages in force at all such institutions. The question before the Club, and fully discussed at its meetings last summer, was whether the Medical Club was to stand or fall. It was agreed that it should stand; but that an increase of the annual subscription was the only condition on which it could do so. The subscription was raised accordingly to an amount which is much below the annual sum required from other Clubs of smaller pretensions. In all this there is nothing unusual; certainly nothing unwarrantable. To insist upon continuing members of the Club at one guinea annually, as some country members are doing, is surely to demand for themselves conditions which no other Club would accede to. The members had the alternative before them either of letting the Club fall and losing all the money they had invested in it, or retaining it and their investment by increasing the originally low subscription. If a third course was possible, we should like to see it put to the test of experiment.

Homo.—The purchase of a medical *clientèle* requires caution like every other business transaction; and if disappointment be ever experienced by the purchaser, it is as frequently his own fault as that of the seller. Instances of malfeasance on the part of the latter have occurred often enough to make "business caution" imperative.

AIDE TOI, LE CIEL T'AIDERA.

To the Editor of THE LANCET.

SIR,—In last week's issue you direct attention to the system of medical relief in Edinburgh, which has been brought to light by the labours of the Association for Improving the Condition of the Poor of that city, &c.

That medical relief to the poor in Scotland is most defective will be exhibited when I state that, in round numbers, the poor of Scotland cost nearly double as much to maintain as those of Ireland. That the insufficiency of the stipends and the generally imperfect character of the service have attracted the attention of other than merely professional observers is shown by the circumstance that, at the annual dinner of the Poor-law Medical Officers' Association last July, the Hon. E. S. Gordon, in returning thanks for the House of Commons, said "that he was a member of that body in Scotland which was analogous with the Poor-law Board of England, and he was ashamed to see the miserable stipends paid to men of that profession in return for important services. It was impossible for that Board to pay more; but he believed that attention was being directed to the condition of medical men, and he trusted that remedies would be found for existing evils."

In point of fact, the Scotch Poor-law medical service labours under exactly the same disadvantages (except that they are a shade more aggravated) that the English service does, and which the Poor-law Medical Officers' Association was originated to remove. Hitherto, as you know, our labours have been attended with the most gratifying results, and we have every reason to believe that before a great while most of the grievances of which we complain will be either largely diminished or wholly removed. Now, I would counsel our Scotch brethren to form an Association having similar objects. Surely it is a desirable movement, when it can be shown that an improvement in the status and remuneration of the service would lead to a diminution of suffering amongst the poor, and a curtailment of the excessive expenditure on poor relief.

But this is not the sole reason for my addressing you. There can be no doubt that an Association framed on the same principles as ours would not only effect much local good, but could afford valuable assistance to us. And for this reason: we have found that English M.P.s are oftimes deterred from taking parliamentary action in our favour from fear lest they might excite the political hostility of the boards of guardians of the city or county they may respectively represent. Such a dread of consequences cannot affect the members for Scotch constituencies, and therefore if locally solicited they might safely support us. That this view is correct was shown by the fact that in the debate on the Superannuation Bill several Irish members took a prominent part, to which action they were stimulated by certain dispensary physicians, in return for similar good offices from us when their Bill was under parliamentary consideration.

Since then an Irish Association has been formed, and I learn that its members are distributed over the whole island. With that Association we have decided to establish an *entente cordiale*, with the view to an interchange of parliamentary action for the redress of each other's grievances. Now, could we get our Scotch brethren to do the same, we could so work the House of Commons that, though we might gratefully accept the aid of the corporations, we should soon be in a position to do without them.

Should any action follow this suggestion, I need not say that our Association will be happy to render any aid in its power; and if it be doomed to meet with no collective response, then, seeing that after all we have certain common objects—these being the good of the poor, the diminution of the burdens of the ratepayers, and an improvement in the status of a very considerable section of the profession,—we will still hold out the right hand of fellowship to such of our Scotch brethren as may be disposed to join us in our efforts.

I am, Sir, yours obediently,
Dean-street, Soho, Jan. 3rd, 1871. JOSEPH ROGERS.

The Vaccination Act at Northampton.

The Board of Guardians of this town find themselves involved in some difficulty about carrying out the provisions of the Vaccination Act. One way and another the Act meets with such impediments in Northampton as to be in great measure inoperative; for we read that out of 2496 births registered within a given period, only 1059 vaccinations had taken place; so that after making a large allowance for deaths, removals, &c., there remained just upon 1000 children still unvaccinated. The guardians appear to have had the wish to carry out the Act; for, under their instructions, proceedings have been taken against certain defaulters, with what result is shown by the following statement of the prosecuting officer:—

"In obedience to the instructions given to me on the 18th day of January last, I have summoned about sixty persons. Seven were convicted, and ordered to pay fines and the costs, and five ordered to pay the costs, of whom four complied. The remainder, who appeared to the summons, complied with the order, but the magistrates did not give costs. As these costs would amount to a considerable sum if all the persons liable were summoned, and no order for costs made, I wish for the direction of the Board. I have done everything I could to induce the parents to comply; but, owing to the opposition to the Act, unsuccessfully."

The cost of every summons and order is 4*s.*; and although the offenders are in all cases sufficiently warned before they are summoned, yet when they are brought up to answer for their default, and, finding that they must either pay a penalty or comply with the law, then accept the latter alternative, it appears to be the practice of the Northampton magistrates to let them off without paying the costs incurred through their recusancy. Thus the sixty summonses cost the guardians £27; and as they find that at this rate the expense to the ratepayers of prosecuting the whole 990 defaulters would be over £400, they not unnaturally hesitate to proceed further in the matter. Whatever may be the legal view of this position of affairs, we cannot but express our own opinion that all cases wherein the acceptance of vaccination *follows* a summons in the line of cause and effect should be regarded as convictions, entailing costs upon the defendant. If this is not law, it is common sense at any rate. The Act does not seem to find favour in the eyes of the Northampton magistrates; for we read in the *Northampton Mercury* that they have lately decided to reduce the penalty to 2*s.* 6*d.* Clearly it is not the law that is in fault this time, but its administrators.

A Hater of Sick Clubs has our hearty concurrence as to the *raison d'être* of such institutions, though we are not in a position to pronounce on the merits or demerits of the Association referred to.

Skin-grafting.

To the Editor of The Lancet.

Sir,—Soon after the publication of Mr. George Pollock's case of Skin-grafting at St. George's Hospital, I extensively grafted on his plan a large old varicose ulcer on the leg of an elderly woman, with rapid and perfect success. On seeing the leg some weeks after, I was struck by the general appearance of the limb; the new skin differing so much from that which is usually seen in recently healed ulcers, being softer, whiter, and much healthier than the thin, stretched, parchment-like skin produced by healing from the margins. This induces me to hope that in the following case by grafting I may be enabled to preserve a hand of much use, which if left to only marginal cicatrisation would be, if not amputated, next to useless.

Some three weeks since, a healthy young man, aged eighteen, had his right hand and arm caught by, and drawn in between, the cog-wheels of a windmill, the result being compound fracture and dislocation of the two middle metacarpal bones, contusion and great laceration of the skin of the back of the hand, and stripping off the greater part of the palm with the short muscles of the little finger. There were also six or eight severe lacerated wounds of the forearm and arm, with crushing of the soft parts; but the bones were uninjured, and the joints were intact. After adjusting the parts as carefully as possible with silver-wire sutures, I placed the whole limb in carbolic-acid dressings, and trusted to his youth and country air to carry him through clear of pyæmia, gangrene, &c. For days the lad did badly; delirium and severe surgical fever came on, and I almost repented my conservatism; but he rallied, though with the loss of the whole of the flap of the palm, and much integument on the dorsum and arm. On proposing grafting some new skin on, my patient strongly objected to undergo any further pain. I now thought of the plan which I am delighted to see by last week's Lancet has been so successfully practised at the Aberdeen Infirmary by Mr. D. Fiddes and others. I shaved off a quantity of epidermis (free from hairs) from his sound arm, and freely dusted it over the granulating surfaces. As yet I cannot tell the result; but I trust it may be as I anticipate—viz., that the engrafted skin will not have that tendency to pucker and contract that we have been accustomed to see. By-and-by I will let you know the result. Meanwhile I should like much to hear from those who have seen more of it, what are the characters of engrafted skin.

I am, Sir, your obedient servant,

Chelmsford, Dec. 19th, 1870. Jas. Nicholls, F.R.C.S. (Exam.)

P.S.—Since I last wrote to you, my case of skin-grafting has gone on first-rate. All the wounds are covered with firm healthy skin, and the new skin shows no disposition to contract at all, although I am not using any extension.

Jan. 4th, 1871. J. N.

Hospitals and the Inhabited House Duty.

There is nothing like plenty of assurance. Dr. Hall seems to possess this quality in an eminent degree; for by a round assertion that no one had any beneficial interest in the occupation of the Sheffield Hospital, he succeeded in proving that the trustees were not liable for the payment of rates. Happily the assessor thought that such institutions ought to be let off, and the hospital was let off accordingly. Dr. Hall stated that since his management of the hospital he had never paid rates, and that he never intended to pay any.

The Medical Bill.

Dr. John Broom.—Our correspondent is pleased with the general character of the Bill; but objects to the facilities for registering foreigners in Clause 28, and suggests that Clause 29 be so altered as to make all medical practice for gain *or otherwise* punishable. Both of the points have been brought under our notice by other correspondents. As to the recognition of foreigners, the clause places the responsibility of this step on the General Medical Council. It does seem monstrous that a graduate of a respectable foreign or colonial University should not be recognised throughout the scientific world. Only the best diplomas and degrees would be likely to be recognised. The alteration of Clause 29 suggested by our correspondent and by many others is open, we think, to two fatal objections. First, Parliament would not sanction it; and secondly, if it did, it would be a dead letter. The profession does not need protection from coarse quackery. It has a right to ask that its titles be considered sacred; but more than this it would be alike undignified and useless to ask.

Mortality in Mile-end.

To the Editor of The Lancet.

Sir,—Dr. Corner, in his letter of last week, having most *unjustly thrown a doubt upon my veracity*, I am compelled, greatly against my inclination, to ask the favour of your publishing my final rejoinder, and which Dr. Corner's remarks alone have provoked.

The fact of Dr. Corner having read his report from the rough draft, of his having sent to you an erroneous report without first reading it, of his having allowed a statement so injurious to Mile-end to remain before the public without correction, being tacitly admitted, nothing further need be said thereon. Dr. Corner, however, ridicules the idea as to "sensationalism," and it is to prove *the truth* of my remark that I trouble you with one illustration.

On the 1st of December, 1869, Dr. Corner reported that "the mortality of Mile-end had doubled in the past three weeks, and that last week the deaths exceeded the births—an almost unprecedented occurrence even in the worst times of disease." The paper in which this statement was recorded was by some one sent to the *Daily News*, and a strong "leader" was written thereon. I on the 8th of December forwarded to the *Daily News* a letter, which was published, and of which the following is a copy:—

Deaths in Mile-end Old Town.

To the Editor of the Daily News.

Sir,—The vitality of the poor of the East of London being low, it is more than ever important that no unnecessary fear as to disease should be engendered. Hence my writing to correct an erroneous report which has gone forth and been commented upon, "that the mortality in Mile-end had doubled in the past three weeks, and that in the week ended 20th November the deaths exceeded the births—an almost unprecedented occurrence even in the worst times of disease." It is true that the deaths (56) did exceed the births (53); but then the births were unusually low. This is accounted for by the cold weather having prevented mothers venturing out to register the births of their infants. The average births per week in 1868 was 70. In the corresponding weeks of 1867 and 1868 they were 97 and 81, and in the two preceding weeks of 1869 they were 102 and 83. It will, therefore, be seen that 53 was far below the average. Infant mortality is undoubtedly higher than last year; but the deaths (56) were 13 less than in the preceding week, 4 less than in the subsequent week, and 6 less than in the week ended 31st July last. Other instances could be quoted where deaths have exceeded 56, which, with a population of 87,000, is not a high rate. How, then, can it be said that "56" is a number "unprecedented" even in the worst times of disease?

I am, &c.,

E. J. Southwell,

Sup. Registrar of Births, Marriages, and Deaths.

Mile-end Old Town, Dec. 8th, 1869.

This letter was copied into the *East London Observer* of the 11th December, and the Editor, in commenting thereon, said that "two statements of a most exaggerated character relative to the health of Mile-end Old Town—statements calculated to do great harm by the needless alarm they would cause—appeared in the *Daily News* of Saturday last. One statement is given in the contradiction forwarded to the Editor by Mr. Southwell, Superintendent Registrar; the other was that some of the schools in the district had been closed in consequence of the rapid spread of scarlet fever. We may add that Mile-end contrasts favourably with some of the adjoining districts, as appears by the statements read to the guardians on Thursday, and Dr. Rygate reported to the Saint George's vestry on the same evening that the disease is declining at the East-end generally. Nothing is more calculated to check improvement than false reports. It is difficult not to feel that the reports of the medical officer of health of Mile-end Old Town, Dr. Corner, and his suggestion that the schools should be closed, have had something to do with the propagation of these needlessly alarming rumours."

I am, Sir, yours very obediently,

E. J. Southwell.

Bancroft-road, Mile-end Old Town, Jan. 4th, 1871.

Dr. P. A. Young.—Neither Politzer's nor Gruber's works are translated in England. The Sydenham Society are about to publish a translation of Von Troltsch's short treatise. A translation of Politzer's or Gruber's works would be regarded with interest by English aurists.

Chirurgus.—We think that it might not be a disqualification for the naval service; but it depends upon the extent of it. Why not obtain the opinion of some naval surgeon after his inspection of the intending cadet?

Treatment of Morbus Pedicularis.

To the Editor of The Lancet.

Sir,—Would any of your correspondents inform me of the best mode of treating a case of morbus pedicularis in an old woman. I am applying strong mercurial ointment, and giving iodide of potassium internally. This latter is, I believe, in accordance with a recommendation of Dr. Thomas Hawkes Tanner.

Yours truly,

Kildare, January, 1871. L.R.C.P.E.

WHAT NEXT?

DR. ILIFF, medical officer of health for the district of Newington, has made a very proper stand against the desire of the vestry to impose upon him duties entirely foreign to those of his own proper office. The vestry wished to memorialise the Home Secretary to appoint their medical officer of health an inspector under the Gunpowder and Fireworks Act (23 & 24 Vict., cap. 139); and this notwithstanding a protest by Dr. Iliff, who asserted that the inspection of firework factories was in no way connected with the prescribed duties of a medical officer, and that it was not a function proper for a medical man to undertake. Section 17 of the Act empowers the Home Secretary to appoint an inspector to visit mills and factories where gunpowder, fireworks, &c., are manufactured, and to report *to him* as to whether the regulations of the law are complied with or not. But so far as this Act affects the public, it is a question of safety rather from the police than from the medical point of view. Indisputably it has nothing whatever to do with matters of hygiene, and the sole province of medical officers of health is public hygiene; and when, as in Dr. Iliff's case, they have an objection to be saddled with a new and uncongenial duty, we take leave to say that any attempt to force it upon them cannot, and must not, be permitted to succeed.

Mr. H. B. Condy.—Why not correct the "erroneous impression" by a fresh analysis conducted by a chemist of authority? We see no other course for our correspondent.

PERMANGANATE OF POTASH IN THE TREATMENT OF GONORRHŒA AND GLEET.

To the Editor of THE LANCET.

SIR,—In your impression of the 3rd instant I noticed an article on the above subject by Dr. Thos. Warden, and I determined to try its effect.

A few days ago a patient came to me, suffering with an obstinate gleet, which he had had for two months. Different remedies had been tried, and failed to effect a cure. I ordered permanganate of potash (four grains to the ounce) to be injected four times a day. After having used it three times, the patient came to me, saying it caused such great pain that he could not use it. The discharge was now considerably increased, and the glans penis and prepuce very much swollen and hot. I then reduced the permanganate to half the strength (two grains to the ounce), and continued it for four more injections, when I could get the patient to use it no longer, on account of the great pain it caused. In Dr. Warden's article he mentions that it "gave rise to no pain or inconvenience." In this case it greatly aggravated the discharge, besides causing the glans and prepuce to swell and become very tender.

Your obedient servant,

Leith, December 14th, 1870. F. R. L. S.

To the Editor of THE LANCET.

SIR,—For the last four years I have used permanganate of potash as an injection in gonorrhœa. Though not an unfailing remedy, it has been so far successful that I continue to use it among other modes of treatment. In the acute stages, if injections are applicable, it is, I think, inferior to acetate of lead; in the third, or chronic stage, it will often cause a speedy cure, and is one of the best injections. It has often cured long-standing cases where "everything has been tried." In gleet it will frequently be found of service. As Dr. Warden states in THE LANCET of December 3rd, "it never causes pain or increase of discharge." My prescription has generally been a drachm of Condy's solution mixed with a pint of water.

I am, Sir, your obedient servant,

PHILIP MIALL,

December 10th, 1870. Surgeon to the Bedford Infirmary.

DIET OF THE POOR.

M. A. B. suggests that, since the lack of vegetable diet causes so much disease among the poor, the well-to-do families should arrange with their greengrocers to give them, for a trifling subscription a week, the odds and ends left after each day's sale. "M. A. B." pursued this plan in her own neighbourhood with the most gratifying results. There is no doubt that the poor, even when they have the opportunity, do not adequately appreciate the vegetable constituents of diet; and, even in servants' halls, butcher's meat is consumed in such disproportionate excess as not only to induce or aggravate special ailments (Bright's disease, for example), but even to cause physical and moral *inertia* of the most inveterate kind.

GROCERS AND THE SALE OF WINES AND SPIRITS.

To the Editor of THE LANCET.

SIR,—The following question has been put to me for a reply by a gentleman interested in the matter:—"Do you consider, or do you not, that the power lately given to grocers to sell wines and spirits has tended to the inducement of solitary, secret drinking, especially among females of the middle and upper classes?"

As I have no means of knowing anything about the subject, living as I do in a place where the grocers do not sell wine or spirits, I shall feel greatly obliged if any of your readers will give me their opinion upon the question, addressing their replies to me, as I understand the subject is to be brought shortly before the Home Secretary with a view to alteration of the law.

Your obedient servant,

Settle, Yorks, January, 1871. EDWIN S. GREEN, L.R.C.P., &c.

INDIAN MEDICAL SERVICE.

A CORRESPONDENT is very desirous of ascertaining whether there is any probability of a competitive examination for admission to the above service being held in August next. Our correspondent, in common with other intending candidates, has been waiting for some announcement of the intentions of the Indian Government in regard to these examinations.

Querens.—The Report of the Royal Sanitary Commissioners has not yet appeared. The copy of the evidence taken may be procured at Hansard's, in Great Queen-street.

UNIVERSITY COLLEGE HOSPITAL.

A GRAND BALL in aid of the funds of this hospital is to take place at Willis's Rooms on Tuesday, the 17th January. This will afford an opportunity to the friends of the hospital to replenish the funds of the institution, which is feeling the recent and present drain of public charity into so many special channels. No hospital deserves better at the hands of the public. The fact that every penny derived from the fees of students goes to the hospital exchequer, and never reaches the pockets of the members of the medical staff, is an illustration of the general economical management of the hospital. We may take this opportunity of expressing our regret at the want of support given to the children's wards. It seems that these wards, which were provided in obedience to public demand, are always full, and yet scarcely a five pound note has been given for their support for months past.

"CHOCOLAT-MENIER."

THERE are few who have not encountered the words "Chocolat-Menier" at railway stations and other places, and there are, doubtless, many persons acquainted with Menier's manufactory at Noisene, near Paris. This establishment has been appropriated by the medical service, and converted into a large hospital for the sick and wounded, and it may now contain many an unfortunate fellow who in happier days, attracted by the celebrity of M. Menier's chocolate, has paid a visit of curiosity to this extensive manufactory. From all we can hear, it is much better adapted to its present purpose than many of the buildings that have been treated after a similar fashion.

TREATMENT OF PRURIGO.

To the Editor of THE LANCET.

SIR,—Would any of your numerous readers assist me in the treatment of an obstinate case of prurigo, which has hitherto resisted all I have endeavoured to use for its eradication?

My patient, who is a young man of some twenty-four years, has been suffering now for the last six years from the most intolerable itching on the skin of the scrotum, penis, and perineum, insomuch as altogether to render him unfit to participate in society, and even to incapacitate him for his regular daily employment. He consulted me about three months ago, and on examination all I could discover were some very indistinct papillæ, with slight redness of the surrounding skin of the several parts I have enumerated. The itching was out of all proportion to the eruption, and at times so severe as to render him half distracted, and to give his friends cause to fear even for his reason. I have tried alkaline, kreasote, conium, and sulphur baths, prussic acid, and bichloride of mercury, all of which have failed in giving him anything but temporary relief; and, besides the above, have tried most of the different methods of treatment which books prescribe for P. mitis, P. formicans, and P. senilis.

Hoping that a similar case successfully treated may have been part of the experience of some of your readers, and that the urgency of the symptoms may be a sufficient apology for occupying your space,

I am, Sir, your obedient servant,

Southport, Dec. 20th, 1870. MEDICUS.

Small-pox.—If properly performed, the primary vaccination is a sufficient preventive; but, as a general rule, vaccination should, for safety's sake, be repeated. Revaccination proves its necessity by the amount of irritation which follows it. The hypothetical case of *our* correspondent may be regarded as quite safe.

Asclepiad.—The epigram of the late Chief Baron Pollock is as follows:—

"Mercurius Veneri morbosæ proximus instat;
Nymphaque postsequitur Sarsaparilla deum."

Dryasdust.—The proficiency of our Scottish neighbours in medicine is of high antiquity. If our correspondent will turn to Buchanan's History of Scotland, he will find at the close of the 13th book a reference to the skill of James IV. in the treatment of wounds. "Cujus rei," adds the historian, "peritia toti Scotorum nobilitati, ut hominibus in armis assidue viventibus, fuerat priscis temporibus communis."

Q. R. S., (Liverpool.)—We regret that we cannot indicate anyone by name. Let our correspondent consult a respectable practitioner in his own neighbourhood.

A MIDWIFERY GLOVE.

To the Editor of THE LANCET.

SIR,—Can any of your readers inform me if such a thing as a "midwifery glove" has ever been introduced to the profession? A medical friend of mine a short time ago, while attending a case of labour, contracted syphilis, and suffered severely in consequence. It has occurred to me that if a glove could be made which, without interfering appreciably with the sense of touch, would afford protection against inoculation, it would be a great boon.

Yours, &c.,

January, 1871. C. T. B.

LIABILITY OF OVERSEERS.

IN a recent trial in the County Court at Llangollen, Mr. David Hughes, surgeon, sued an overseer, Mr. Roberts, butcher, for £2 for attendance in a midwifery case, which proved fatal. The guardians refused to pay, on the ground that the husband was in a position to pay. The Judge did not consider so, and thought the overseer quite justified in having given the order. "If he was not justified in so doing, I might say that the country would not be fit to live in." The counsel for the defendant said he had no doubt that if the surgeon made a proper representation to the Poor-law Board, they would make an order on the guardians to pay his fee.

ACCORDING to the *South London Press*, the St. Olave guardians have decided to appropriate a cottage near the workhouse for the reception of small-pox cases, in consequence of the prevalence of the disease.

M.D.—Our correspondent inquires as to the best method of procedure in the case of infectious diseases. Where the articles used by the patient are comparatively worthless, it is perhaps well to destroy them; but where this is undesirable, the most efficacious method is to subject them to a dry heat, the nearer 300° F. the better. All linen might be put, first of all, into water to which chloride of lime or some other disinfectant had been added, and afterwards boiled for some time. All articles of clothing that cannot be washed should be well beaten or brushed, and exposed to the air for several days before being taken into use. The room may be re-papered or whitewashed; but in any case it is well to have it disinfected by sulphurous acid or chlorine, after which a solution of carbolic acid may be scattered about, and the room thoroughly ventilated by maintaining the windows open for ten days or a fortnight. If the room has a fireplace, a fire will prove an effective adjunct to the ventilation. Lastly, let all parts of the room to which this could be done be well scrubbed with soap and water before it is again occupied. We do not suppose that all would concur in the above suggestions. Some would think the precautions unnecessarily refined; others would deem them insufficient; but we hope that they are, at any rate, clear and practicable.

THE PRESSE ARTÈRE.

A CORRESPONDENT writes as follows:—"On the 14th ultimo I had an opportunity of seeing this instrument used by the inventor, Mr. B. Wills Richardson, of the Adelaide Hospital, Dublin. The case was that of a young girl aged about sixteen, who was suffering from extensive disease of the tibia, and in whom amputation through the joint was performed. A long anterior flap was first made, the joint opened, and a short posterior flap, the saw used to remove the condyles of the femur, and the cartilage of the patella was sliced off, leaving the bone itself behind. The popliteal artery was secured readily by means of the presse artère, and a small artery twisted, no other vessel requiring a ligature; the flaps were then brought together by five pins with twisted sutures. The presse artère was removed on the fourth day, and on the 23rd ult. the stump looked extremely well, no suppuration having occurred except where the needles were placed. The patient was greatly improved by the operation, looking healthy and in good spirits, quite a contrast to what she presented previously. It may be mentioned that the wound was dressed with carbolic-acid cream, and covered with oiled-silk."

COMMUNICATIONS, LETTERS, &c., have been received from—Sir H. Thompson; Dr. Brown-Séquard; Prof. Erichsen; Dr. Habershon; Prof. Rolleston, Oxford; Prof. Rutherford; Mr. Henry Lee; Dr. Wilks; Dr. Hyde Salter; Dr. Barnes; Dr. Gavin Milroy; Mr. Ward; Mr. Whitburn; Mr. Cumming, Exeter; Mr. Jas. Hird, Newport, Salop; Mr. Lawson Tait, Birmingham; Mr. J. B. Gill, Dover; Mr. Lascelles; Mr. Curran, Mansfield; Mr. Spanton; Dr. Etches, Helperby; Mr. G. Chunder Roy, Glasgow; Dr. Kernot, Poplar; Mr. Steele; Dr. Arnold, Chichester; Dr. Davidson, Liverpool; Dr. Morris, Barnham; Dr. Broom, Sheffield; Mr. Bhuttacharjia, Tirhoot; Dr. Snow, Wolverhampton; Mr. Ireland; Dr. Tate, Aberfeldie; Mr. Sutton, Norwich; Dr. Blood, Kapunda; Dr. Williams, King's Lynn; Dr. Eastwood, Darlington; Mr. T. Holmes, Ventnor; Dr. Helsham, Brixton; Dr. Williamson; Dr. Davies, Wrexham; Dr. Nicholls, Chelmsford; Mr. Taylor, Bradford; Mr. Braddon, Exmouth; Mr. Richards; Mr. Ward; Dr. Herbert, Mullingar; Mr. T. Prideaux, Sheffield; Dr. Lawrence, Chepstow; Mr. Wood; Mr. James; Dr. Wilson, Ayr; Mr. Telford, Bury; Dr. W. Smith, Hollinwood; Dr. Matthews, Yealand Conyers; Dr. Macdonald; Mr. T. Milman; Mr. Dowse; Mr. Phillips; Mr. R. Alexander; Mr. Marshall, Aylesbury; Dr. Duncan, Portsmouth; Mr. Horsfall, Leeds; Mr. Hicks; Mr. Wilkins, Scarborough; Mr. Davison; Dr. Anderson, Edinburgh; Mr. Mason; Dr. Brown, Penrith; Dr. Howard, Philadelphia; Mr. Poole; Mr. Emery; Mr. Waller; Dr. Worthington; Dr. Hardie, Manchester; Dr. Howard, Honduras; Mr. Carroll, Parkhurst; Mr. Purvis; Dr. H. Wright, Knaresborough; Dr. Miller, Eye; Mr. Sagar, Leeds; Dr. Spencer; Mr. Crump; Dr. Roberts; Mr. Thomas; Dr. Vachell, Cardiff; Mr. Edwards, Stone; Mr. Mayo, Mildenhall; Mr. Sturmers, Walsingham; Mr. Jones, Dinas; Mr. Davison; Mr. Bartlett; Dr. Marshall, Bath; Dr. Wilson, Huntly; Dr. Tulloch, Loch Carron; Dr. Anderton, Hyde; Dr. Wood; Dr. Domenico, Parma; Dr. Bell, Cockermouth; Mr. Reed; Mr. T. Ashford, Spalding; Mr. Campbell; Dr. Currie, Beringay; Dr. Strickland, Halifax; Mr. Evans; Dr. Roberts; Mr. Knight; Mr. Clements, Colchester; Mr. E. T. Phillips; Mr. Cooper; Mr. Layland; Dr. Hall, Sheffield; Mr. E. Gayer, Bengal; Dr. Meehan, Holycroft; Dr. Emmens; Dr. Rigden; Dr. Crouin, Queenstown; Mr. Stothland; Dr. Wilson, Paddock; Mr. Gardner, Edinburgh; Mr. Grigor; Dr. Rugg, Clapham; Dr. Yeaman, Glasgow; Mr. Pollock; Captain Harris; Mr. E. J. Southwell; Mr. Blake; Dr. Rains, Chorlton; Dr. Turner, Alderton; Dr. Brown, Rochester; Mr. Young; Dr. Phillips; Mr. Rainer; Dr. Hollis, Yarmouth; Mr. Weale; Mr. Baynes, Stamford; Mr. Chepmell, Taunton; Mr. Goodman; Mr. Lang; Dr. Giles; Dr. Spence, Denholm; Dr. Hewitson, Allenheads; Dr. Cottington, Galway; Mr. Cundy; Dr. Anderson, Edinburgh; Dr. Minchin; Union Medical Officer; J. C.; Blair; Justice; A Married Student; A Hater of Sick Clubs; Inquirer; A Naval Medical Officer; Sperans; Royal Microscopical Society; L. S. A.; C. K.; X. Z.; A Dispenser; P. M.; B.; A. B. P.; Medico; Gamma; Q.; A. B. A.; Beta; Chirurgus; W. B.; Alpha; J. J.; Small-pox; Homo; A Staff-surgeon, R. E.; A. R. S.; M. A. B.; &c.; &c.

Brighton Guardian, Oswestry Advertiser, Epsomian, Essex Weekly News, Exchange and Mart, Sheerness Times, Chorley Standard, Melbourne Age, Melbourne Daily Telegraph, Milk Journal, Leeds Mercury, Poole Express, Midland Gazette, Mansfield Reporter, Medical Temperance Journal, Herts Observer, Anglo-American Times, and *Anti-Tobacco Journal* have been received.

Medical Diary of the Week.

Monday, Jan. 9.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
MEDICAL SOCIETY OF LONDON.—8 P.M. Lettsomian Lectures: Mr. F. J. Gant, "On Excisional Surgery of the Joints."

Tuesday, Jan. 10.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ETHNOLOGICAL SOCIETY OF LONDON.—8 P.M. Lieut. S. P. Oliver, "On the Pre-historic Remains in Brittany."—Dr. Hooker: "Exhibition of Stone Implements from Queen Charlotte's Island."—Rev. D. R. Thomas and Mr. T. M'K. Hughes, "On a Cairn near Cefn, St. Asaph."
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8½ P.M. Dr. C. T. Williams, "On the Duration of Phthisis, and on certain Conditions which influence it."—Mr. J. G. French; "On the probable Cause of the Post-mortem Muscular Contractions in Cholera, &c."

Wednesday, Jan. 11.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
CANCER HOSPITAL.—Operations, 3 P.M.
HUNTERIAN SOCIETY.—7 P.M. Meeting of Council.—8 P.M. Dr. Hilton Fagge, "On a Case of Dilatation of the Stomach."
ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Mr. B. T. Lowne, "On the Anatomy of Ascaris Lumbricoides."—Mr. H. J. Slack, "On the Use of Colloid Silica in Preparing Crystals for the Polariscope."
EPIDEMIOLOGICAL SOCIETY.—8 P.M. Papers (by Dr. Christie, of Zanzibar, and from Official documents), "On Cholera in East Africa."

Thursday, Jan. 12.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 12; other Operations, 1 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Friday, Jan. 13.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
QUEKETT MICROSCOPICAL CLUB.—8 P.M.
CLINICAL SOCIETY OF LONDON.—8½ P.M. Annual General Meeting for the Election of Officers.—Mr. T. Smith, "On a Case of Ulcer following Vaccination." Adjourned Discussion.—Dr. Silver, "On the Use of Veratrum Viride in Acute Rheumatism."—Mr. Teevan: "Four Cases of Operation for unusually Large Calculi."

Saturday, Jan. 14.

ST. THOMAS'S HOSPITAL.—Operations, 9½ A.M.
HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

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